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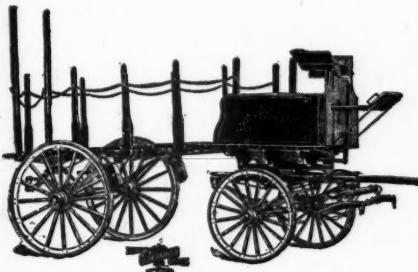
# THE TEAM OWNERS REVIEW

Official Organ: The National Team Owners' Association.  
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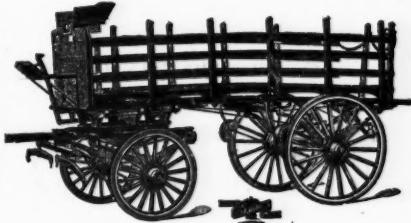
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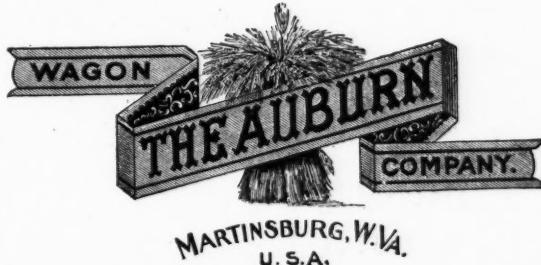
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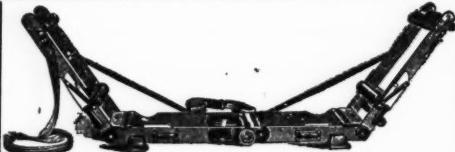
THE TEAM OWNERS REVIEW.



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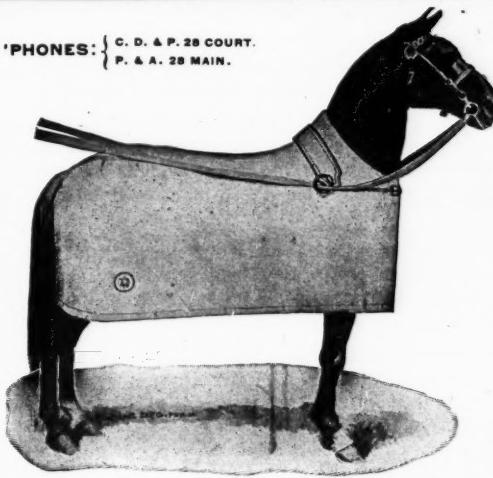
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YOU USE THE SAME CLEVIS YOUR GRANDFATHER DID.

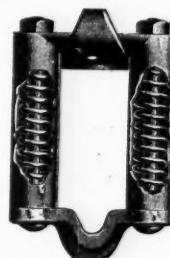


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# **SMITH SPRING CLEVIS'S**

They are cheap,  
They take the jar from the horses' shoulders,  
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They "give" enough to encourage a horse in starting a load,  
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## THE TEAM OWNERS REVIEW.

# TO THE TEAM OWNER

The financial stringency, which has depressed business throughout the country during the last year, shows every evidence of becoming very soon a nightmare of the past.

From all over the land reports are coming to this office, that the teaming business, which had to suffer with the rest, is again taking on new signs of prosperity, and THE TEAM OWNERS REVIEW hopes that these signs will mean a permanent, lasting improvement.

This being the case THE REVIEW believes the occasion a very good one to call the attention of every team owner to the fact, that, while he is prospering in business, he should not forget to aid in the support of this paper, a journal which in many thousands of ways has made and is constantly making itself useful to him.

Through the efforts of THE TEAM OWNERS REVIEW, since it was first published in 1902, improved conditions have manifested themselves in the teaming trade, by which every team owner has been benefited. What was at one time an unknown, demoralized trade, is now a definite, well organized branch of the commercial interests of this country. This was accomplished through the organization of the National Team Owners' Association, a movement which was for the first time agitated through this paper, and was made an accomplished fact through the efforts of this paper.

The good the National Association has done to the teaming interests of this country is so vast, so far-reaching and so universal, that its influence is now felt everywhere, and it will continue to do so, as the Association grows.

This paper for the first time brought the team owners from the various States of the Union together, and thus aided in the cementation of a social and business relationship, the value of which is priceless.

Is there one of the team owners, who can now count his friends and acquaintances in the business by the hundreds scattered throughout this country, who would like to go back to the time when the horizon of his business relationship among the men in his own trade was limited by the walls of his own office, or at best by the boundaries of his home city?

It was THE TEAM OWNERS REVIEW which brought them together, which still keeps them together, and which from month to month gives them the opportunity to discuss through its columns subjects of common interest and mutual advantage.

And what does THE REVIEW ask in return for this service?

**"ONLY THAT EVERY TEAM OWNER SUBSCRIBE FOR THIS PAPER."**

Although the readers of this paper now number into the thousands, there are still many team owners who only get the paper when it is sent to them as a sample copy and they do not have to pay for it, and to them we want to say, that the dollar, which the yearly subscription to THE TEAM OWNERS REVIEW costs, is a dollar well spent in your business.

In fact, you cannot invest a dollar in your business, that will bring you a larger profit than this paper does, if you read it from month to month. There is not an issue which does not contain some information pertaining directly to your business, which is not worth to you ten times what the paper costs you for one year.

Send your dollar now and let us enter your name beginning with this issue.

**THE TEAM OWNERS REVIEW,**

Renshaw Building,  
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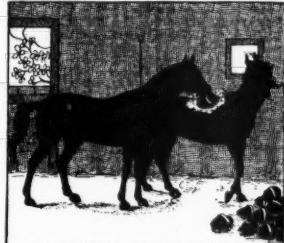
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Work him while doing so if you have to—but a day or two rest is better—yet in either case

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And receive a package by mail.  
 Every horse owner should have it.  
**ASK YOUR DEALER FOR IT HE MAY HAVE IT**

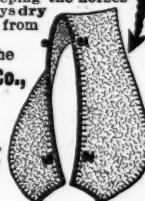
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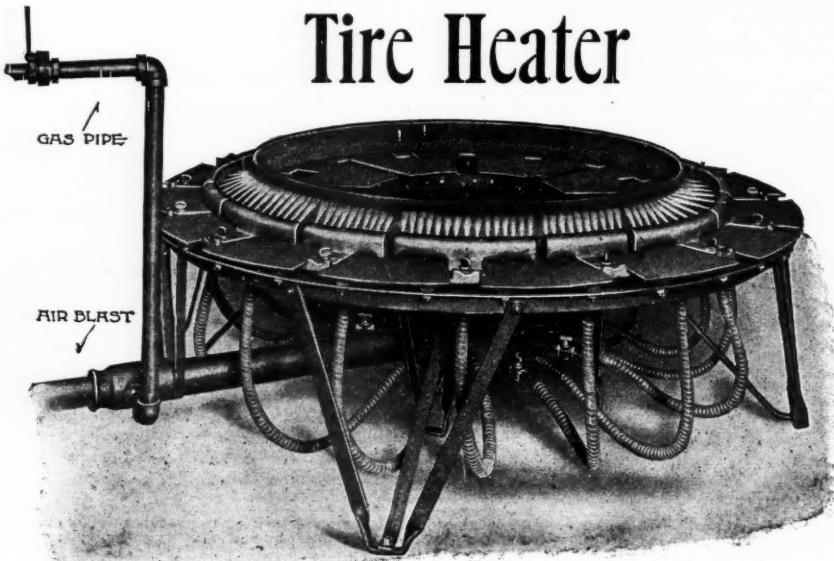
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**Burlington Blanket Co.,**  
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TRADE MARK  
**Ventiplex**  
 PADS

If your dealer can't supply you, write us.



# The "Rochester" Wrought Iron Tire Heater



THE increasing use of wide tires throughout the country and in the larger cities has made the removal of such tires without injury to the rims a matter of great importance in cases where it is absolutely necessary to take the tire off in order that some repairs may be made to the wheel.

Our "ROCHESTER" TIRE HEATER, shown in the above cut, is a practical appliance which does away with the necessity of cutting the tire off and the consequent re-welding, and provides means for quickly heating and expanding the tire so it can be gotten back onto the wheel.

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The construction of our heater is first-class throughout, the wheel table being of boiler plate, and the legs, braces, etc., of wrought iron, making it practically indestructible. Burners are adjustable for wheels of all diameters from 62 inches down to 24 inches, only half the number of burners being used on small wheels. Will heat light or heavy tires up to and including 6 inches in width. Very valuable for removing Automobile channels. The saving in time, labor and fuel which this appliance will effect insures its wide and immediate adoption.

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**ROCHESTER TIRE HEATER CO.**  
ROCHESTER, N. Y.



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At a slight additional cost you can have your wagons equipped with

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**TIMKEN ROLLER BEARINGS** reduce draft 50 Per Cent. by enabling a two-horse team to do the work of four. They are simple, durable, and dust proof—require oiling but once a month.

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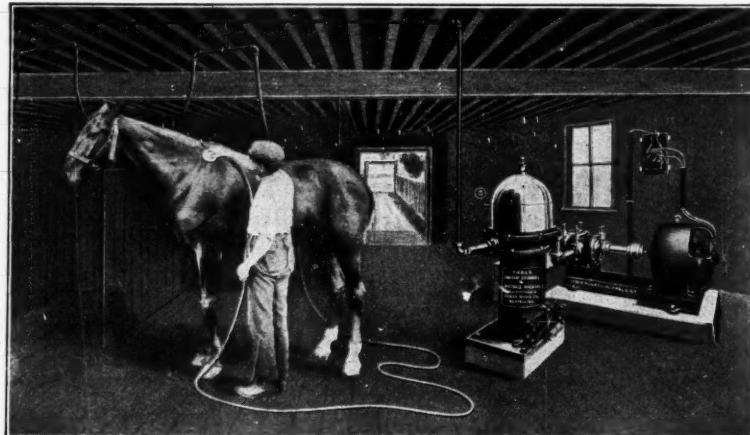
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ALL DIRT,  
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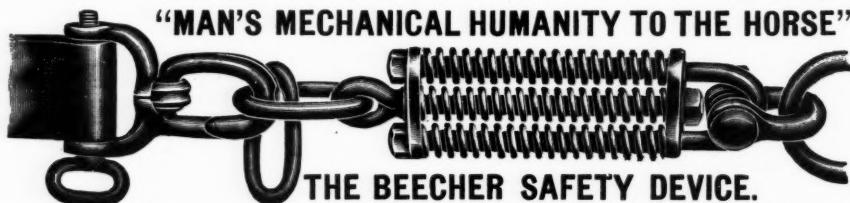
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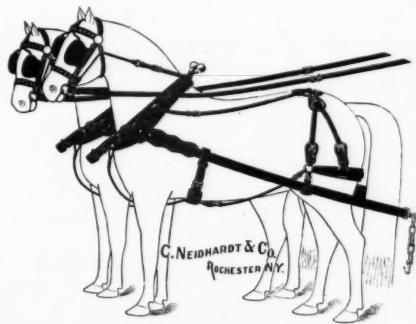
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Advice and directions as to treatment on each bottle.  
This is not a liniment.

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The latest improved,  
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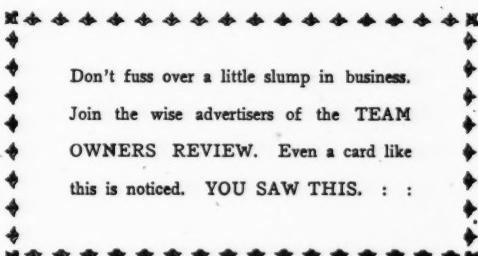
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Let us prove the worth  
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Traces which we sell to  
you under a positive  
guarantee if not satis-  
factory we'll refund  
the price.

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# KRESO DISINFECTANT FOR THE STABLE

Prevents Infectious diseases. Kills disease - germs, parasites, lice, maggots, worms. Cures galls, grease-heel, scratches, thrush, proud flesh, mange, sores, collar-boils, barb-wire cuts, etc. . . . .

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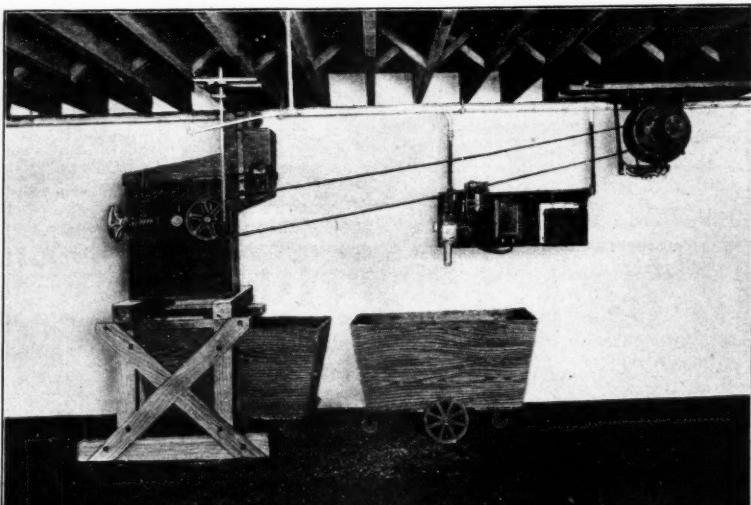
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is guaranteed to Save 15 per cent. on whatever quantity of whole Oats you feed your horses, or ship the Crusher back to us at our expense. Try it first before you buy.

OUR TERMS OF SALE ARE - NO SATISFACTION - NO SALE.  
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CAN BE OPERATED IN ANY STABLE.

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ORIGINATORS  
OF THE CRUSHED OATSHORSE FEED.

# ~THE~ TEAM OWNERS REVIEW.

A Monthly Journal published in the interest of The Team Owners of the United States and Canada.

ENTERED AS SECOND CLASS MATTER IN THE PITTSBURG POST OFFICE.

Vol. VIII.

PITTSBURG, PA., AUGUST, 1909.

No. 8.

## TEAM OWNER'S DAY

The suggestion made at the Boston convention that the team owners throughout the country celebrate every year a "Team Owner's Day," struck many of the delegates as a very fine idea, and everybody expressed the hope, that the plan for such an event would very speedily become an established fact.

The lines on which the project is to be laid out are somewhat after this manner. To foster a better feeling among team owners in certain districts of the country, and to get the men from the different firms acquainted with one another, it is proposed that the team owners from two or three neighboring cities or localities gather together and hold a picnic. For example, the Buffalo Trucking Association has for some years made it a practice of holding an annual outing, on which occasion the team owners and their families meet together for a day's frolic on the river, the lake or in the woods. These events have always been the means of much pleasure and enjoyment. Now why could not the Team Owners Associations of Cleveland, Buffalo and Detroit make a joint arrangement to hold one of these outings together? They could decide upon a place within easy reach of all. Just think for a moment what it would lead to. The team owners from these three cities would get together. They would bring their wives and children along. They would have a delightful festival consisting of all manner of pleasures, amusements and entertainments. The men could talk business if they felt so disposed, while the ladies were arranging a delicious repast from the lunch baskets. Or they could meet at some beautiful lake-side hotel or perhaps a mountain resort.

Why there are hundreds of ways in which these affairs could be arranged and all would surely be productive of much benefit. Most of us now go to church and other kinds of picnics, because we feel that it is an obligation which we have to perform. Often we meet people on these occasions who are not congenial to us and we come away much bored and out of temper.

Now a picnic of team owners and their families ought to be a great success from the start. The men are in the same business, their thoughts run along the same lines and these annual meetings could be made so entertaining that in a year or two they would be looked forward to with great pleasure.

The suggestion made about Cleveland, Detroit and Buffalo, could also apply to Philadelphia, Baltimore, to Trenton, Jersey City, Newark, N. J., to New York City and Brooklyn, to Cincinnati, Louisville and Indianapolis, to Pittsburgh, Wheeling and Columbus, O., etc., etc.

It would mean a combination of pleasure with business. Indeed, the possibilities of "Team Owner's Day" are so great, that the good to be derived is positively inestimable.

Now who is going to start the first one? THE TEAM OWNERS REVIEW should like to hear soon.

## WORK HORSE PARADE SPREADING

The work horse parade idea seems to be spreading all over the country. New York, Boston, Philadelphia and many other cities now have annual parades, and the matter has recently been taken up by the Road Drivers' Association of New Jersey, the largest of its kind in the world. The Boston parade was the pioneer event in America, and its managers have taken great pains to improve it year by year.

**THE AGE OF SCIENCE AND INDUSTRY**

Address of W. H. Fay, of Cleveland, Ohio, Delivered at the Boston Convention.

The delegates from Cleveland have looked forward to this convention with the hope that some great benefit will be derived from it for them and for all concerned.

At this period in the history of America, Boston presents a favorable place for holding this convention. It has to do directly with our own fortunes and existence. For in the time of the revolution, she first showed open resistance to England. We all know the story of the Boston Tea Party, and the sending of troops to the continent to subdue the supposed vassal colonies. Every other colony was in sympathy with Boston and the cause of freedom; all arose in union to begin the work which became the greatest event in the history of America.

Since the battle of Bunker Hill, June 17, 1775, the progress of this nation has been so rapid as to far exceed all others. We are now an independent union with a government entirely popular. Our population has developed enormously. And in this day of peace with the world, we look upon the city of Boston with admiration and respect.

If the result of the war had been otherwise, how much would it have affected our lives and the success of our undertakings? Now the nation lies prostrate beneath the arm of science and successful industry. In what measure can we thank Boston for making this convention possible?

The Team Owners' Association of Cleveland, which sends three delegates, was organized in the early part of the year 1907. It attained a membership of about 50 in six months. Then some lost interest, others would not join. Latest evidence shows an increase of interest among other team owners.

During some of our meetings we have had veterinary surgeons lecture to us and have discussed many questions concerning the care of horses and their humane treatment. Our social feature has not at all been neglected. We have enjoyed several good entertainments and smokers.

The greatest achievement of this organization was the enlistment of the aid of the Cleveland Chamber of Commerce. The Cleveland Chamber of Commerce is composed of about two thousand business men whose object is first of all to bring more business to the commercial and industrial enterprises of Cleveland.

It is the business of the Chamber to arbitrarily develop co-operation. In our case we were not satisfied with the shipping facilities given by the

railroads. The Team Owners' Association with the Chamber of Commerce secured the aid of the railroads in helping us load and unload car lots.

The Cleveland Chamber of Commerce is doing a marvelous work for the general welfare and development of Cleveland, in devoting its energies to the commercial, social, civic and esthetic development of the city. The latest great event in Cleveland's history was the Industrial Exposition, originated by Mr. F. F. Prentiss, a former president of the Chamber of Commerce. The Exposition building was erected in forty-seven working days, constructed with a greater floor space than Madison Square Garden, New York, with an area of about 115,000 feet.

The work has been elaborated in every respect. A notable feature was the street decorations with 15,000 electric lamps and other illuminants. At the entrance of Superior and East Sixth street, leading to the Exposition building were placed two massive statues, representing the "Spirit of Progress." The rest of the way resembled much the appearance of a circus field.

After months of patient work it presents a complete exhibit of the great range of products, which make her among America's cities, one of the greatest in diversification of industries and manufactures. The recent exhibits at Rochester and Buffalo have been excelled by this monstrous display of two million dollars' worth of exhibits.

Among the two hundred and eighty-three exhibits, those of especial interest were: A hundred and fifty horse power gas engine; it is Cleveland made and is claimed to be the largest ever set up. And the fastest rapid firing gun in the world, which can fire one hundred shots a minute for a distance of three and a half miles. Also a mammoth mahogany log brought to Cleveland to impress Clevelanders with the importance of the city as a hardwood center. This log is African mahogany and was brought to New York and on to Cleveland by the Martin-Barriss Lumber Company. It weighs sixteen thousand, eight hundred pounds, is nine feet high and fourteen feet long.

The object of this exposition was to give the Cleveland people a comprehensive display of its manufacturing resources and for distinct commercial reasons. The exhibit was found educational as well as entertaining and met the hearty approval of all as shown by the average attendance of fifty thousand people a day.

This age is a most extraordinary one. The great display indicates the increase of industry in America and that advance in knowledge, science and industry of America.

Automatic machinery is not far from being perfect. Huge steel arms ram their way down into holds of steel vessels, clutch great masses of ore or coal, lift them high into open light, dump-

ing them easily into cars standing near by. Steam shovels deepen shallow harbors, and eat away enormous hills of dirt. Powerful pumps drive through the city its water supply, pump out mines and propel great engines.

One marvels at this automatic world of machinery.

Among the great inventions in the present age are: Electric magnets with the power of lifting a thousand tons of pig iron per day; the telephone, and most wonderful of all is the wireless telegraphy. Professor Miller of Case School of Applied Science has invented an instrument for photographing the human voice.

These inventions which astonish the world and seem of sudden growth are the results of years of experiment. Winton perfected bicycles after ball bearings were invented. Bicycles brought about the invention of pneumatic tires, and with pneumatic tires, Winton, Stern, Jackson and others made automobiles possible. With the advent of the automobile came the improvement of the gasoline motor. Without a perfect light-weight gasoline motor aeroplanes would have been impossible.

To-day, thanks, in part to the man who invented ball bearings, we have aeroplanes.

As we observe this phenomenal age of development, the team owners perceive a confronting question of vital importance. Some men have been so bold as to discuss the question of which will out-rival the other, the automobile or the air-ship? But the question for the team owner is whether or not the automobile, with its rapid speed and untiring energy, will out-rival that faithful beast of burden, the horse, as a means of transportation.

Though it is doubtful that such will occur in a few generations, nevertheless the change threatens.

In closing, we wish to extend an invitation to all who may have the opportunity of visiting Cleveland, to come, and the team owners there will make your visit both interesting and pleasant. We also wish success to the management of this convention and to all team owners, hoping that the National Team Owners Association will become the strongest of its kind in the country.

#### THE JULY REVIEW

"Just received July issue of THE REVIEW and found it very interesting throughout.

"ADOLPH CHARD, Chicago."

#### OFFICIAL NEWS

"Considering the limited time you had for getting it through the press it can be pronounced a success. One thing I heartily commend is the optimistic spirit manifested through every article of the July REVIEW.

"HUPP TEVIS, President N. T. A."

KANSAS CITY, Mo., July 16, 1909.

To The Officers and Members

National Team Owners' Association:

At the last convention held in Boston, your delegates conferred upon me the honor of National Secretary. In accepting this position, I did so, fully realizing that much work must be done to put this Association where it belongs in the standing of organizations. I am fully aware of my limited ability to perform such work as it should be done, but I felt then and I feel now, that I will have the united efforts of every member of this Association to help me in my work; the facts are, I have already received such assurances from the members, that failure seems impossible.

I thank the delegates for the honor conferred; and with the hearty good will of every member, we will march up the hill of effort to the top-most pinnacle of success.

Write this office as often as you can; it makes no difference whether you have much or little to say. Write.

Give the officers-elect your support and the credit shall be yours.

Yours truly,  
W. T. BANCROFT,  
National Secretary.

#### C. P. SHEA CONVICTED

Cornelius P. Shea, who is well known to the teaming interests of this country as the president of the International Brotherhood of Team Drivers during the great strike of the drivers in Chicago in 1905, was convicted in New York City the other day for attempting to murder Alice Walsh, a former Chicago woman with whom Shea is alleged to have lived. The pair quarrelled after the woman found out that Shea had a wife living in Boston, and she swore that he stabbed her twenty-five times with a penknife in their rooms. The maximum penalty for the charge is 25 years imprisonment.

## UNIFORM CLASSIFICATION

Progress is reported by the special committee of the railroads which is working on an agreement for uniform classification upon which to base rates for freight moving in all parts of the country. This involves uniformity of rules, minimum weights and description of articles. The undertaking is unquestionably one of the most important ever entered upon by the common carriers.

There has always been almost a total lack of uniformity, owing to the different standards used in the several so-called classification territories. This lack of uniformity has caused endless trouble for shippers and receivers and, of course, for the carriers themselves. For years uniformity was talked of, but it was not until 1907 that a practical effort was made to reach an agreement on the subject. It was as a result of a meeting then held that the present committee was appointed. The work necessarily is slow because so many elements enter into it. If an agreement is to be satisfactory, it must be based on scientific principles as developed by long years of transportation. Moreover, there must be considerable elasticity to whatever rules are adopted to allow for changing economic conditions.

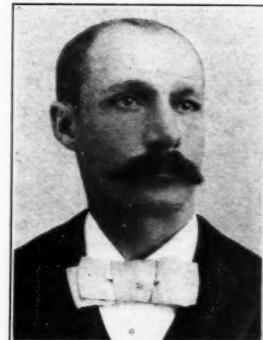
Some idea of the complications with which the committee is confronted may be found in the variation in ratings for carload and less-than-carload shipments, as presented by the three classification territories. In the Southern classification there are 3,503 less-than-carload, and 773 carload ratings, the carload ratings being 22.1 per cent. of the less-than-carload ratings. In the official classification, 5,852 less-than-carload and 4,235 carloads ratings were made, the carload ratings being 72.4 per cent. of the less-than-carload ratings. In the Western classification 5,729 less-than-carload and 1,690 carload ratings were made, the carload ratings being 29.8 per cent. of the less-than-carload ratings. In the Southern classification 32.92 per cent. of the less-than-carload ratings are in the fifth, sixth and lettered classes. In the official classification only 1.25 per cent. of the less-than-carload ratings are below fourth class. In the Western classification no less-than-carload ratings are below fourth class.

The task of reconciling these variations cannot be appreciated by the layman except in a general way. The problem of reducing to a common basis involves advances in rates as well as reductions, and a thousand other things. It is a work which should have been undertaken years ago.

## WHO KNOWS THIS MAN?

If there is a team owner who knows where Peter Strickfaden can be found at present he will do a great favor if he will write to his wife and let her know about it.

Peter Strickfaden is from Buffalo, N. Y. He was employed as a team driver in that city with Mr. Martin Marlin for 12 years, and after Marlin sold his business to Louis Debo, he worked for



PETER STRICKFADEN.

the latter during 3 years. Then about three or four years ago he suddenly disappeared and no one has ever heard of him, although his family has made the closest inquiry about him in many places. His wife lives at 46 Seventeenth street, Buffalo, N. Y., and in a letter to THE TEAM OWNERS REVIEW, in which she enclosed Peter Strickfaden's photo, she has asked us to help find him. His age is about 45 years, his complexion is light and his height about 5 feet 7 inches. He left Buffalo, on August 14, 1906.

## BIG ORDER FOR HORSES

The largest order Fiss, Doerr & Carroll, of New York City, has ever filled has just been executed for the United States Express Company. In the amount of money involved, if not in the number of horses, it was doubtless the biggest deal on record for the old Bull's Head market, where the selling of horses has been going on almost one hundred years. The big express company took 1,100 horses, to be used in the cities of the country from New York to Omaha. The contract called for a good type of expresser, block built, with plenty of snap and activity, 16 hands high and weighing from 1,275 to 1,300 pounds. The price was not made public, but the big deal probably involved a good deal more than a quarter of a million of dollars.



THE DELEGATES AT THE ANNUAL CONVENTION IN BOSTON.

## Among The Associations

### *Chicago, Ill.*

The last regular meeting of the Chicago Commission Team Owners was held July 10 at the Briggs House. There was a good attendance. The subject of the proposed tariff on hay and oats came up for discussion and it was decided that our members send the following letter to our representative in Congress at Washington, D. C.:

"The heaviest burdens placed upon me as owner and operator of horses is their maintenance, and the principal food is oats and hay. As a resident of the state and district you represent, I therefore ask you to use your vote and prestige in having the duty removed from oats and hay."

This is a matter of vital interest to every team owner in this country, and if the National Team Owners Association is successful in fighting this iniquitous burden upon the team owner, it will have earned the gratitude of every man in the trade.

Our association is running along in good shape and all our members are busy.

W. J. COLOHAN, Secretary.

### *Philadelphia, Pa.*

We are very busy, business is exceedingly brisk and all have plenty of work to do. Our principal and most serious question now is the wood block paving, which they propose to lay on Market street; in fact, the mayor has signed the ordinance for same. Our association, upon hearing that he signed the ordinance, immediately started to take out injunction proceedings to prevent the city from laying the same. We have had an uphill fight in this matter, as the large department stores in our city have been against us, and our members have worked very hard against this, but I think now we have the situation well in hand, and we hope to win out.

Our delegation to the Boston convention, from the remarks passed by them, I think, had a most elegant time, and know that the National organization will accomplish a great deal of good.

The question is also being taken up by us as to the duty on oats and hay, and as Philadelphia usually succeeds in all its undertakings, we hope to win on this. Our association is in a flourishing condition, everyone working. Will give you more news later on.

With kindest regards from all the boys,

THEO. GABRYLEWITZ.

### *Buffalo, N. Y.*

The seventh annual convention of the National Team Owners Association has passed into history. Mr. H. C. Moore as president of the association deserves the thanks of every team owner for the fight he has made to uplift and strengthen the teaming business. His honorable and honest manner of dealing with all men has won for him an everlasting friendship, which will last until the end of our lives. During Mr. Moore's terms as president the financial depression swept over the country; many team owners felt the depression, loss of business, a decrease in revenue, which together with the high prices of feed, horses, repairs and with little or no increase in the prices of carting caused many to keep close watch on the financial end of their business, feeling they must not incur expenses that they could not readily see their way clear to pay. While many new local associations have been formed in the past two years only a few have been added to the National Association. Twenty-six locals and four individual members who had paid their initiation fees were represented at the convention in Boston. Now that prosperity is with us and means for raising revenue have been found it is not too much to expect that at our next convention double the present representation will find their way to Cincinnati. I am sure Mr. Moore, with every member of the Philadelphia Association, will be found working early and late to make the National Association the strong and powerful organization which all have hoped to see. The new officers are workers and the members of the association expect to hear good progress has been made at the opening of the next convention. A good start was made when the committee was appointed to go to Washington to make a protest against the duty on oats, hay and horses being kept at an exorbitant rate. This subject should not be dropped; every team owner should send a protest to the Congressman from his district, and Senator from his state. The duty on hay is now \$4.00 per ton; oats, 15 cents per bushel, and it is proposed to raise to 20 cents per bushel. Horses, \$30.00 dollars each, where the value is over \$150.00—an additional duty of 25 per cent, is added.

The question of handling freight at the various railroads is becoming a serious question. It is a question that must be met in every city and town along the lines of the various railroads. Every change should be reported to the national

**EQUIP YOUR TEAM WITH U. S. HAMES—THEY ARE STANDARD QUALITY**



THE LADY GUESTS AT THE NATIONAL CONVENTION IN BOSTON.

## THE TEAM OWNERS REVIEW.

president and secretary. When the situation warrants the Board of Directors should be called upon to act. The merchants and manufacturers are beginning to wake up and take notice. The number of changes in rates made every day are bewildering the shippers; the only remedy is the State and Interstate Commissions. While the railroads have a legal right to make changes in their rules and rates, so have you the same right to appeal to the commissioners for relief.

R. G. M.

*Cincinnati, O.*

The delegates and members of our association arrived homé safe and were very much pleased with the business transacted at the National Convention held in Boston, Mass. The members and their wives wish to extend their thanks to the Master Team Owners Association of Boston and the wives of the members of that association for the kind hospitality shown them upon their stay in their city.

We feel too much praise cannot be extended to the Ways and Means Committee for their success in the Team Owners Manual and also to our retiring president, Mr. H. C. Moore, for the trying moments he had while in office. We sincerely hope that all the locals affiliated with the National Body will lend their willing hands to aid our new officers in the difficult undertakings set before them for the coming year. We feel no doubt that if we all lend a welcome hand good results will be obtained.

Sincerely yours,

THE CINCINNATI TEAM OWNERS ASSOCIATION.  
H. STUEVE. Secretary.

*Trenton, N. J.*

This has been the best year for our members since our organization. Everybody is busy and a big demand for teams at all times; contractors and builders in all cases giving our association members the preference in employment, recognizing the necessity of the increase of rates. Our association has built up the teaming business from a struggling competition, where the rates were from \$3.50 to \$4.00 per day for team, wagon and driver, to \$5.00 per day and a proportionate increase in cart hire. The hiring public are very glad to do business with us, as our members are reliable and can be depended upon to deliver the goods, or a good day's work. In case of disputes as to charges, etc., it is referred to our executive committee and I am pleased to state that they have very little work to do as everybody is working in harmony.

Our members are very much pleased at the deserved recognition of our esteemed president, Peter H. Dolan, as a member of the National Board of Directors. He has worked hard and faithfully to build up our organization here and has the very highest consideration from state, county and city officials. I predict that he will be of great help on the board.

At our first meeting after his return he appointed a very strong committee to wait upon Hon. Frank O. Briggs, United States Senator, and Hon. Ira W. Wood, member Congress from this district, to urge upon them the great need of allowing the tariff upon grain to remain as it is. Both these gentlemen are honored citizens and we feel sure of receiving a courteous consideration of our requests.

Our position is so plain and simple; in a few words we show the non-association team owner that we are earning money for him. We hope to be considerably stronger numerically before snow flies.

Did you get one of our souvenir steins at Boston? If not, let me know and I will see that you do.

WILLIAM D'ARCY, Secretary.

*Youngstown, Ohio.*

I enjoyed reading the report of the Boston convention and was only sorry I was not able to be with the boys—for I realize that the Team Owners Association is a good thing and helpful in many ways. Our association is growing steadily, and I feel it won't be long before all the team owners of the city will realize what it means and join hands with us. As I see it, it is an association to help each other. We have joined the National Team Owners Association, which is a step forward. We have done some good in getting railroad crossings repaired and trees trimmed, and our social features are on the increase. Nothing like a good brotherly feeling all along the line, always glad to see the other fellow doing business too.

We had a very successful work horse parade in May.

J. W. PARKIN.

*Kansas City, Mo.*

On the 8th of last month, it was the evening of the regular meeting of the local team owners' association, the ladies gave a reception and surprise party in honor of the election of W. T. Bancroft as National Secretary.

Mr. Bancroft did not dream but what it was the regular monthly meeting, and was reading

communications and bills to "beat the band," when in walked the ladies and demanded possession of the meeting. After the new secretary had gotten his breath, and accused every member present of throwing him down, we adjourned to the banquet hall, where a fine spread awaited those present. During the evening short talks by the delegates to the Boston convention were indulged in; each delegate reported some action the National had taken that would be of benefit to the locals. Mr. Bancroft expressed his thanks to his fellow members for the honor conferred. The ladies who attended the Boston convention also made a few remarks, and after they had told of the late hours and the hard times they had in keeping the delegates straight, things did not seem so funny, especially to Mr. Barton, Mr. Newby and Mr. Morr. They don't understand yet, how Mr. Barr escaped, but you can't tell about Barr; he's a "fixer." Mrs. Barton, Mrs. Barr and Mrs. Bancroft all spoke kind words for the association, and a general good time was had.

#### *Des Moines, Iowa.*

The teaming situation in this city at the present time represents nothing but work, work, work. Every transfer man is loaded down and everything is very prosperous except the prices we get for our teams. They, I am sorry to say, have not advanced with the cost of operating and maintaining our business.

W. L. H.

#### *Minneapolis, Minn.*

Your convention number came to hand and was greatly appreciated. Things are moving along quietly, everybody on the jump and business increasing so fast that nobody has any teams to spare to lend to their friends. A number of firms are considering the advisability of putting in storage warehouses to take care of the increase in business which may reasonably be expected. Our delegates have just returned from Boston and report having had a magnificent time and are very enthusiastic over the improving efficiency of the National organization and its growing importance. We were glad to see the adoption of the "open shop" resolution as we believe it is the only thing to safeguard business from dictation by irresponsible men. The Humane Society in this city is planning to hold a work-horse parade some time during August, but has not seen fit to request the co-operation of the transfer men and we are keeping out of it. Our association is not particularly in favor of anything of the kind and

apparently does not feel the necessity thereof. The members take a good deal of pride in the appearance of their horses and wagons and outfits, and keep them up in good shape. Our association has not grown any but forms the strong nucleus, controlling the bulk of the business in this city in the transfer line.

W. M. BABCOCK, Secretary.

#### FERRIES FOR VEHICLES

As an engineer who worked many years in the Department of Docks and Ferries, I would like to say that I do not think that we have grasped the ferry problem yet. The ferry as a means of communication bears favorable comparison as regards cost to the city with the bridges. A twenty-million-dollar bridge represents at 4 per cent. an annual loss to the city of \$4,000,000, and there are many others—this not counting one red cent for maintenance, operation, or repairs.

We have three means of connecting the different portions of the city where divided by water, viz: Ferry, bridge or tunnel. The most modern and the best means of communication is the last, both on account of low cost of maintenance, but also on account of quickness of transit. But up to the present we have used tunnels only for railroad transit, and this leaves the problem of wheel or vehicular traffic to be provided for either by ferry or bridge. The dwellers across the East River are well off, because they have all three means of transportation. I think the problem of East River ferries should be solved by making them merely freight ferries, for wheel traffic, of course, taking what few passengers may be willing to use them.

As regards Staten Island, I suggested to the Staten Island Chamber of Commerce, of which I was a member many years ago, that it work for a ferry service at St. George, which would be purely a passenger service, with boats like the Monmouth and an occasional freight boat between, and to have freight ferries at Stapleton and West Brighton or Port Richmond, taking, of course, passengers if they wished. I think this is still the solution of the problem.

But the most modern, up-to-date means of trans-river transportation is the tunnel and a freight ferry service until we advance far enough to have tunnels for wheel and pedestrian traffic, as well as for train service by rail.

CIVIL ENGINEER.

New York, July 4, 1909.

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EQUIP YOUR TEAM WITH U. S. HAMES—THEY ARE STANDARD QUALITY

## THE TEAM OWNERS REVIEW.

OFFICIAL PUBLICATION OF  
THE NATIONAL TEAM OWNERS ASSOCIATION  
AND  
AMERICAN TRANSFERMEN'S ASSOCIATION.

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S. ZINSMEISTER .....SECRETARY.

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Please mail all correspondence for publication, so as to reach publication office by the 15th of month.

Write on one side of the paper only.

Write all names plainly. When writing over an assumed name, always give the editor your right name also, as anonymous communications cannot receive attention.

THE TEAM OWNERS REVIEW,  
Telephone 4246 Court. PITTSBURG, PA.

Vol. VIII.

August, 1909.

No. 8.

The matter of unloading and loading freight cars at the railroad terminals, which has been the cause of controversies between the team owners and railroads in many cities, seems to be now in a fair way of receiving a final settlement through the efforts of the Legislative Committee of the National Team Owners Association. This committee has brought the matter to the attention of the Interstate Commerce Commission in Washington, D. C., and a final hearing of the subject will be held this fall.

As this question, wherever it has come up

locally, has always been settled in favor of the team owners, as it should be, it is safe to assume that, when the Interstate Commerce Commission hands down its decision, it will be on the same lines, a corroboration of the local decisions.

In presenting this matter through its various stages up to the highest tribunal, the National Team Owners Association has done a noble work, the results of which will be of benefit to every team owner in this country.

\* \* \*

THE TEAM OWNERS REVIEW in its last issue had to ask for the indulgence of its subscribers and readers, because for the first time since this journal was published, it was issued later than its date implied. An explanation is in order for this seeming tardiness, which really was no fault of ours, but was the result of our anxiety to give our readers the latest news.

At the convention in Buffalo, the date of holding these meetings was changed from the second to the third Monday in June. In consequence the editor of this paper had only a very few days in which to get out the journal, and, as it was deemed of the utmost interest and importance to have in the next issue following the date of the convention, a report of that meeting, it was decided that it would be better to hold up the paper for a few days rather than have it appear without the convention report.

This was the reason our readers received the July issue a few days later, and we trust that our excuse will be found satisfactory.

\* \* \*

It is to be hoped that by the time this issue of THE TEAM OWNERS REVIEW will reach its thousands of subscribers and readers, every team owner in this country will have been in communication with the member of Congress from his district for the purpose of obtaining his assistance in preventing any increase of the tariff on hay and oats.

This matter is of the most vital importance to every team owner, and the National Team Owners Association, which started the agitation at its last convention in Boston, of bringing the subject before Congress, is deserving

of the thanks of the entire trade. During the last five years, practically everything which the team owner uses in his business, from a whip cord to a wagon tongue, has increased in price.

The wages of the drivers have been increased everywhere, and it is not too high an estimate when we say, that comparing the cost of operating a teaming business of to-day, with what it cost five years ago, we find it at the present time about 25 per cent. higher. Withal, the team owner has not been able to increase his hauling rates to any appreciable extent. Naturally, all of this means a loss to him, and if, in addition to the high price of hay and oats, which is already in existence, an extra tariff is to be added, the team owner will certainly be a great sufferer.

Hay and oats are absolute necessities in his business, they are the staple of food for his horses, and there is every reason for the team owner to object to have this burden placed upon him. We hope that every team owner in the United States will at once act in accordance with the suggestion of the National Team Owners Association.

\* \* \*

The article in this issue of THE REVIEW purporting to show that as a horse feed corn is equal to oats, will no doubt be found of much interest by our readers, especially at this time. The price of oats has never been higher than it is now and although the reports from some of the great market centers would indicate that it may go down, still the decrease does not amount to much. On the other hand, it seems to be well established from the crop reports of our corn growing districts, that this country will produce the largest crop of corn in its history. In that case the price of corn should naturally become very low in a little while, especially in view of the fact that many of the western farmers are still holding on to their last year's crop in the vain hope that the price of corn has not yet reached its highest figure. When therefore the new crop comes on the market and last year's will have to come out, there should be a market supply abundantly large to assure the team owner of cheap horse feed.

We ask everyone who gets this paper to read our article "To The Team Owner," on page four of this number. If you are not already a subscriber to THE REVIEW send us your dollar now and begin at once; if you are a subscriber hand the article to another, who is not a regular reader of this journal, and thus make him a subscriber. THE TEAM OWNERS REVIEW is working all the time for the interests of every team owner in the country, and it is to your benefit to support such a paper.

#### MUST PAVE WITH GRANITE

Superintendent of Streets Emerson of Philadelphia has been served with a Supreme Court injunction that perpetually restrains him from ever repaving State street, between Devonshire and Broad; Merchants row, between State and Chatham streets; Exchange street to a point 150 feet northerly of State street, and Congress street, from State to Water streets, with any other material than granite.

The purport of the injunction is that the street commissioners in the future must look after streets which need repaving, rather than the superintendent of streets.

The service of the papers created consternation at City Hall, and Superintendent of Streets Emerson at once sent the document to Corporation Counsel Babson requesting information as to just what course he will pursue in the matter.

Recently when the superintendent of streets started repaving the thoroughfares the teaming interests and members of the Chamber of Commerce secured a temporary injunction restraining the city from continuing the work. Their objections were based upon the grounds that the work was not necessary and that the wooden block paving was unsafe for horses. At that time the Supreme Court decided that the street commissioners and not the superintendent of streets had the power of deciding when streets needed repaving. In accordance with this decision the street commissioners gave a public hearing and decided against wooden paving.

Corporation Counsel Babson has not had time to read the injunction as yet, but it is understood that the city will take some legal action.

**NEW YORK FREIGHT SUBWAY**

The plan of W. J. Wilgus, former vice-president of New York Central, and now president of the Amsterdam Corporation, to construct an immense freight subway to circle New York and connect with the freight yards of Manhattan and New Jersey, is receiving the consideration of the public service commission.

It is claimed that the scheme would offer the following advantages. Solve the West Side problem, securing to the city benefits of elimination of tracks at grade, abolition of steam locomotives and betterment of park districts; release New York Central from an unprofitable capital expenditure estimated at \$14,000,000; render feasible rail connections to industries and the water front; avoid interference with marginal ways for passenger railways; relieve streets from vehicular traffic, reducing noise, pavement repairs, congestion and delays to street cars; relieve congestion and uncertainties of harbor navigation; make practicable access to Manhattan of all railroads by rail connections direct to shippers; and release docks and piers from railroad uses, permitting their occupation for expansion of water-carrier traffic.

Congestion and high values of property in Manhattan make large freight terminals impracticable, and cost of transferring merchandise from outlying yards to the city is an important item. It costs the railroads \$1.45 a ton to bring freight from yards on the west side of the Bergen Hills to piers in Manhattan, and 80 cents a ton for cartage to warehouse, making \$2.25 after the freight reaches New York. The bulk of team traffic in 1908 amounted to 19,200,000 tons of merchandise and 4,000,000 of coal.

Cost of the proposed Amsterdam routes is estimated at \$155,000,000 allowing \$100,000,000 for the freight subway, and \$55,000,000 for the terminal belt line for passengers.

Mr. Wilgus says: "New York, with 5 per cent. of the nation's population, produces 11 per cent. of manufactured products, and is the gateway through which flows nearly half of the foreign commerce. In 1908 total imports and exports were nearly \$3,600,000,000, of which over 13,000,000 tons, valued at \$1,600,000,000, passed through this port.

"In manufactures New York ranks first with nearly half million wage earners, representing a dependent population of 2,500,000. There are nearly 40,000 establishments, capitalized at nearly \$1,000,000,000, spending annually for wages \$250,000,000, and with annual production nearly \$1,400-

000,000. Yearly tonnage for Manhattan exceeds 100,000,000 tons.

"Each year 2,000,000 cartloads of rubbish, ashes and street cleanings are taken, chiefly by scow, at cost of \$2,000,000. Not only is this expense objectionable, but there is the necessary use of docks for disposal that could be used to advantage in commerce.

"Another thing we could reduce would be the handling of mail between downtown general office and the Grand Central station and Pennsylvania terminals; 100,000 tons of mail matter require trucking between those points, at cost of \$230,000 per annum, with 30 to 40 minutes required in each direction by wagon."

A summary of tonnage statistics of principal rail and water carriers serving New York follows (in tons):

INBOUND.	Lightered and not Requiring Drayage	Requiring Drayage
Railroads .....	10,682,079	2,136,099
Transit Lines .....	559,500	997,500
Coast Lines .....	1,437,000	1,989,000
Sound Lines.....	774,101	266,263
Irreg Lines .....	3,000,000	.....
Total .....	16,452,850	5,388,882
OUTBOUND.	Lightered and not Requiring Drayage	Requiring Drayage
Railroads .....	3,039,705	1,213,594
Transat Lines .....	805,500	1,583,500
Coast Lines .....	1,476,000	1,859,000
Sound Lines.....	604,456	588,376
Irreg Lines .....	.....	.....
Total .....	5,925,661	5,244,425

It is stated by Mr. Wilgus that his proposed subway would be equipped to handle 90 per cent. of all freight traffic. If the application is approved, it is estimated that four years will see the line in operation.

#### Obituary

JAMES LOVE.

At the home of his father, Sunday morning, May 30, 1909, in the city of Buffalo, N. Y., James Love, 23 years of age, son of Mr. and Mrs. Thomas J. Love. The sympathy of every team owner in Buffalo is extended to the sorrowing parents in their sad bereavement.

**EQUIP YOUR TEAM WITH U. S. HAMES—THEY ARE STANDARD QUALITY**

## MONTHLY MARKET MOVEMENTS

**Grain and Feed.**

There has been a fair activity manifesting itself in the hay and grain market within the last few days, and as a result the price is holding up all around.

**CHICAGO**—Corn was easier on account of the very favorable outlook for this year's crop. July corn closed at 70½ cents; September at 65¾ cents, and December at 55¾ cents. July oats closed at 45¾ cents; September at 40¾ cents and December at 41½ cents.

**PITTSBURGH**—The price of oats fluctuated from 56 cents for No. 2 white down to 54 for No. 4 white.

Timothy hay sold at \$15.50; No. 1 clover at \$12 and No. 2 clover at \$11; oat and white straw commanded the same price of \$9.

No. 2 yellow ear corn was quoted at 85 cents and No. 3 at 83 cents.

**NEW YORK**—July corn was quoted at 80½ cents, September at 76 cents and December at 67½ cents. Oats 55 cents for mixed; 52 cents for natural white and 56 for clipped white.

**PHILADELPHIA**—July corn was 77 cents and August 76 cents. Oats were steady at 55½ for No. 2 white.

**ST. LOUIS**—Corn, No. 2, 73½ cents; July, 71½ cents; September, 66¾ cents; Oats, No. 2, 47½ cents; July, 44 cents; September, 38¾ cents; No. 2 white, old, 53 cents.

**Horse Markets.**

The Chicago horse market has witnessed a steady improvement since the beginning of July, and good specimens of the various classes remained in active demand at fair prices.

Good drivers had a steady inquiry from eastern dealers at \$200@250, the greater part going at \$175@225, and prime animals wanted at \$275@300 or higher. Ice and express companies have been placing large orders for horses in the auction at \$200@270, and top finished drafters were disposed of at \$275 and over, while good heavy weight chunks sold at \$180@220.

Aged and thin horses were in some instances sold below their first cost in the country.

Poor to fair. Poor to best.

Drafters .....	\$125@185	\$200@300
Expressers .....	120@175	190@250
Drivers .....	100@170	175@325
Mules .....	75@125	150@225

In Buffalo many good horses have been received within the last few weeks, but so far sales have not been many. However, inquiries have been quite brisk recently and an active market is looked for during August.

## OATS CROP PROSPECTS

Manufacturers of cereal products are taking special interest in the excellent prospects of the new oats crop, estimated at 1,000,000,000 bushels. This is the stage of the season at which early varieties are ripening and when the heads of the crop generally are filling out. With ample moisture thus far the straw and heads have been fully developed and the body of the grain is now forming under conditions that are all that could be desired.

No other part of the surplus oats world, excepting Russia, appears to be so well favored this year. Last year the United States grew less than a fourth of the world's crop and this year it will contribute nearly a third, on an acreage of only 78,000 acres greater than that of 1908. The current season's estimates are shown in the table following for 1909, compared with final returns of yield, acreage and farm prices on December 1, for six earlier years:

	Bushels	Acres.	Av. Yield	Av. Price	Farm Price
1909 ....	1,066,000,000	32,422,000	32.8 .	*41.0	
1908 ....	807,156,000	32,344,000	25.0	47.2	
1907 ....	757,443,000	31,837,000	23.7	44.3	
1906 ....	964,904,000	30,958,000	31.2	31.7	
1905 ....	953,216,000	28,047,000	34.0	29.1	
1904 ....	894,595,000	27,842,000	32.1	31.3	
1903 ....	987,812,000	28,653,000	34.5	30.7	

\*Chicago December price.

Oats contribute much more largely than formerly to food supplies. The present prospect is that prices will be considerably lower than last year

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or even the year before. But the scarcity of surplus stock, owing to the short crops of 757,000,000 bushels in 1907 and 807,000,000 bushels in 1908, will go far towards maintaining Chicago prices up to the turn of the year at least, at not far from the forty cent level. Prices prior to 1907 averaged a little better than thirty cents, so that average prices stand fully a third higher, for the three years of 1907 to 1909 inclusive, than they were in the four preceding years out of the seven considered above. This illustrates the extent to which one class of industries has had to increase its outlay in the manufacturing cost of raw materials, without being able in retailing its products to charge up.

#### HORSES AND "HORSE FEED"

It is amusing to see in what unexpected quarters the tariff-makers at Washington are continually discovering that they are imposing needless and oppressive burdens on industries of importance in their pretended anxiety to "protect" American interests. Only a few days ago there was forwarded to the capitol from the Team Owners' Association of this city a protest against the duties levied on imported horses and on the various forms of the "feed" used for horses.

Obviously these are taxes on the materials of industry. Horses in this country are of no value except for the drawing of and bearing burdens, and their owners, from the humble hucksters up to the best-equipped draymen, employ them simply as instruments of their trade. It is unquestionably desirable that the business of the city and of the country at large shall obtain its transportation of freight as cheaply as possible, and everything that adds to the cost of that function adds to the cost of all commerce and of living. The same argument applies with equal force to the food needed by draught animals. It is part of the general expense account of the community, and to increase it arbitrarily by legislation is distinctly injurious to the community.

It is pleaded, of course, that the taxes are for the advantage of the farmers. But the number of farmers who raise horses is very small compared to the number who have to use them. Even within this class the taxes are paid by a majority for the benefit of a minority, while the number who raise draught horses is utterly insignificant compared with the whole population. The protectionist argument as applied to the farmers who raise food for horses is stronger in regard to mere numbers, but, though they are more numerous than the horse breeders, they are still a min-

ority and a small one. If the rights of the majority were considered in the legislation at Washington they would have no standing at all—"New York Times."

#### THE HORSE

He who sees no beauty in the horse,  
Nor e'er admires his speed upon the course,  
Is doomed to see life's shady side,  
And always should behind a donkey ride.  
Who with a soul can look with a dormant eye  
And view the trotting wonders as they fly,  
Or see the mettled racers near the wire  
With outstretched necks and eyes of flaming fire,  
Without a tingle from his very toes,  
To see which one first shoves in front his nose?  
If such there be, why all I've got to say  
I thank my stars I wasn't made that way.  
Perfection in either man or beast  
Is rarely found, I think, to say the least;  
Say what you may, we kneel at beauty's shrine  
And humbly bow before a form divine.  
But more admired than beauty is the steed,  
That shows the staying qualities and speed,  
Endurance, muscle, speed and stamina,  
Give us the far-famed winners of the day!  
The calling of John L. we may despise,  
Yet on his perfect makeup feast our eyes.  
The horse endowed by nature for the race  
Was not intended for snailing pace.  
The draft horse, trotter, runner, each we find  
Peculiarly constructed for his kind.  
The All-Wise Power has so arranged the plan  
That He can suit most any kind of man.  
So he whose taste admits of nothing fast  
Can have his ride behind a slow jack-ass.

#### WIT IN THE BACKWOODS

The city man was jogging on toward the summer boardinghouse in a rickety old wagon. The driver was glum and far from entertaining and the city man felt rather lonely.

"Fine field over there," he ventured after a long silence.

"Fine," grunted the driver.

"Who owns it?"

"Old man Bitt, eh? Who are those children stacking up hay?"

"Old man Bitt's boys."

"And what is his idea in having them out there in the field such a hot day?"

"Wal, I reckon he thinks every little Bitt helps, stranger. Get up 'there, hosses!"—"Newark Star."

**A COMPARISON OF CORN AND OATS  
FOR WORK HORSES**

By B. E. Carmichael, Ohio Agricultural Experiment Station.

Problems connected with the feeding of work horses are doubtless of as wide interest as any problems in live stock management. Practically all farmers, whatever particular branch of farming they may be engaged in, have occasion to feed work horses. Besides farmers, commercial firms of various classes keep horses in large numbers for work purposes, and they, too, have a deep interest in methods of feeding that will lessen the cost of maintaining work horses without decreasing their efficiency.

Whether feeds are high or low in price, it is well worth while for feeders to exercise great care in the selection of rations, so as to use the ones that are most efficient and economical. With the present exceedingly high market prices for all kinds of grain feeds, it is especially important that a judicious selection of feeds be made, for much waste may result if attention is not given to this phase of stable management.

Of all grain feeds used in this country, none is in higher repute with horsemen than oats. Many horsemen believe oats to be the best single grain feed for horses, whether kept for draft or for road purposes. It has been stated time and again by practical horsemen and others that horses fed upon oats display more life, keep in condition and endure work, especially during hot weather, better than do horses which receive a grain ration made up largely or exclusively of corn. And the belief in the efficiency of oats as a grain feed for horses is so strong with some horsemen that they are willing to pay exorbitant prices for oats rather than feed corn.

A study of the chemical composition of corn and of oats fails to show any good reason for the exceedingly high favor in which oats are held, or for corn being considered so totally unfit for the use of horses, especially when at hard work. It has been claimed that oats contain a stimulating principle known as "avenine," which gives great spirit to horses. The existence of this stimulating principle is very improbable. Even if it does exist, there is no evidence to indicate that it would have any special bearing upon the practical feeding of work horses.

On account of the wide spread prejudice against corn and in favor of oats, an experiment, from which it is hoped that definite data may be secured in regard to this important subject, has been undertaken at this station. The plan of this work calls for a long-time experiment—not one of a few days' or weeks' duration, but one that will continue for a number of years.

The work was begun in the spring of 1907, and the results of the experiment up to the present time are so striking that it has been thought best to give them to the public at once, with the understanding that further work is being done along this line and that there is a possibility of different results being secured later.

The horses used in the first forty-eight weeks of this experiment were six matured grade Percheron geldings, belonging to the department of agronomy of this station and used for general farm and team work. The horses and the work, then, are fairly comparable with horses and work commonly found upon farms in Ohio and adjoining states. In age, the horses ranged at the beginning of the experiment from seven to eighteen years old. The two horses of each team are of approximately the same age, however. While there are some differences in the conformation, size and disposition of the various horses they are a fairly uniform lot. In order to secure an accurate comparison of oats and corn one horse in each of the three teams is fed oats, while the other receives corn. With the exception of a very few days the two horses which comprise a team were, for forty-eight weeks, worked together; that is, it was very unusual for one horse of a team to work while the other horse was idle. This assures an equal amount of labor being performed by each horse in a given team and therefore permits a direct comparison of the two feeds.

The horse called Tom is by nature a very "easy keeper," and the cost of his maintenance is relatively low on this account. At present the horses which received corn during the time covered by this bulletin are fed oats, and corn is fed to the horses which formerly received oats. In this way, it is hoped that individual differences in the horses may be overcome to some extent.

Until April 19, 1907, all six of the horses were fed practically alike on a grain ration made up chiefly of corn and oats. A small amount (one-half pound) of linseed oil meal was fed for a while prior to April 19. On April 19 the change from a mixed grain ration to the separate grain ration was begun, and on April 25 the single grain ration of corn and oats respectively were in use. The initial three-days' weights were taken May 16, 17 and 18, so that the experiment began after the horses had been on the single grain rations for three weeks.

The interruption in the regular use of the single grain rations were very few. One horse, Bill, was sick for a few days at two different times, and some bran and oats were feed. There was no evidence to indicate that corn was responsible for the slight indisposition, the purpose of using other feeds being to induce the horse to eat. The continued use of corn alone afterwards caused no recurrence of the indisposition, and corn can

## THE TEAM OWNERS REVIEW.

in no sense be held responsible for the trouble. It has been assumed therefore, for convenience in making the calculations, that this horse was fed the usual grain ration during these two very short periods, covering in the aggregate about ten days. Frank, Bill's team-mate, was "off feed" for a short time in February, but, again, the exclusive use of oats cannot be considered the cause.

The effect of the two rations upon the health of the animals, upon their ability to stand hard work, especially in hot weather, and upon the live weight is being observed.

The oats used were grown on the station farm, and, on account of the unfavorable season in which they were grown and harvested, were not of the very best quality. Samples that were tested, weighed from  $28\frac{1}{2}$  to  $31\frac{1}{2}$  pounds per bushel. The corn was, for the chief part, grown on the station farm, but some was shipped in from the western part of the state. The crop of 1907, grown on the station farm, and the corn shipped in, were not quite as good as the corn from the crop of 1906, fed until November 1. From November 1st, to January 24th, the shelled corn that was shipped in was fed, after which the crop of 1907 was used.

The hay used is chiefly a mixture of clover and timothy, with some slight mixture of other plants.

The plan was to feed as many pounds of ear corn to one horse in each team as is fed of oats to the other horse. When shelled corn was fed, the amount was adjusted so as to equal the amount of ear corn indicated above. In other words, for each pound of oats fed to the three horses which received this grain ration, a pound of ear corn or its equivalent in shelled corn (the ear corn of the crop of 1906 yielded, in August, 1907, 82.5 per cent. shelled corn) was fed to the other three horses. At first thought this would seem to be too small an amount of corn to feed, but, as will be shown later, the results of the experiment indicate that the horses were equally well fed. Approximately the same amount of hay was fed to each of the horses with the exception of one (Tom) which would not eat as much as the others. Any hay that was refused was weighed and its weight deducted from the total amount fed.

Weights of the horses were taken each week throughout the experiment. The weights were taken three days in succession at the beginning of the experiment, at the end of each four week period, and at the close of the experiment. The purpose of the three days weights is to overcome the daily fluctuations in weight which may occur from various causes. The variations that

did occur cannot be said to be due to the feeds used, as some variations will occur even where the horses are fed alike.

Weights of the horses were taken near the close of each month previous to the beginning of the experiment. Prior to the time covered by the experiment all the horses were fed practically alike and the two horses that comprise a team were usually worked together. That some variations may occur even when the same feeds are used is shown. Fluctuations must be expected, and slight differences in weight cannot be attributed to the rations used, unless a uniform variation persists throughout a considerable number of weeks.

Beginning November 1, shelled corn was fed to the corn-fed horses until January 24. During this period the weights of the corn-fed horses seemed to be rather lower than normal. This might possibly be due to the fact that the shelled corn was of hardly as good quality as the ear corn, or it may be that the shelled corn was not ear corn, since the horses might eat it faster than the corn could be eaten. There is nothing to indicate that the use of corn during hot weather produced any undesirable effects. The variations that occurred in weight were so slight that no special significance can be attached to them.

No difference due to the feeds used could be observed in the spirit and endurance of the horses. There are some differences in the various animals in respect to temperament, but this factor seems to be more largely dependent upon natural tendencies than upon the effect of any special kind of feed. It would, of course, be folly to say that a well-fed horse will not exhibit more spirit and endurance than will a horse that is fed such scant rations that it is improperly nourished. But this experiment has as yet yielded no evidence to indicate that the use of either corn or oats induce either sluggishness or activity.

The cost of feed per hour in those periods during which little or no work was done is, of course, much higher than the average. This suggests an important point in horse feeding: periods of partial or total idleness are expensive and should, so far as practicable, be eliminated. The total cost of feed and of feed per hour of work is based upon the following assumed values: Corn, 40 cents per bushel; oats, 30 cents per bushel; hay \$8 per ton. These prices did not prevail during the experiment, but are more nearly average prices than were the ones which did prevail. Feeders may readily apply any market prices to the feeds under consideration, as the total amount of feed consumed by each horse is given.

The prices of feed during the experiment were

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much higher than the prices assumed as the basis for my calculations. Corn was worth not far from 60 cents per bushel on an average, while 50 cents was about the average price per bushel of oats. Under the market conditions that prevailed during the experiment the saving from the use of corn was very marked—approximately ten cents per day for each horse for the entire forty-eight weeks. Market conditions should always be borne in mind, as there may be times during which oats would be cheaper than corn, and they should, of course, be used whenever cheaper.

A summary in which the three oat-fed horses are directly compared with the three corn-fed horses shows that the saving effected by the use of corn instead of oats was a material one, even upon the basis of the assumed prices. As was previously stated, Tom requires less feed than do the other horses. The horses which received corn during the time covered by this bulletin are now being fed oats, while the ones which received oats are now being fed corn. It is believed that this matter of individuality will be overcome to a considerable extent by this reversing of rations.

As previously stated, samples of the oats, shelled corn and hay were analyzed. It will be noted that the total dry matter, protein, and crude fiber consumed by the oats-fed horses of each team was in every instance greater than that consumed by its corn-fed team mate. The nitrogen free extract and the fat consumed by each of the two horses in a team was almost the same, save for Tom and Dick. Owing to the fact that Tom ate notably less hay than did Dick and other horses, the total nutrients in Tom's ration are relatively low.

The data obtained, indicate that the nutrients in a given weight of ear corn were approximately as efficient as the nutrients in an equal weight of oats. More than this, even with rations markedly lower in dry matter, protein and crude fiber, the corn-fed horses kept in equally good condition as did the horses which received the oats ration. This would indicate that the efficiency of a given amount of total nutrients contained in corn is greater than that of the same amount of total nutrients in oats. It will be observed that the crude fiber is much lower in the corn than in the oats. A relatively large amount of energy is required to masticate and digest feeds that carry a large percent. of crude fiber. Moreover, crude fiber has a low digestibility as compared with that of the protein, fat or nitrogen-free extract.

If it is taken into consideration that work horses are kept to perform labor, that is, to apply energy, the reason for corn being so efficient is not difficult to understand. The composition of corn shows it to be comparatively low in crude

fiber, which requires a large amount of energy to handle, and comparatively high in nitrogen-free extract, which is efficient in producing energy.

The protein requirement of mature work horses seems to be considerably lower than has been thought by some investigators. Whether or not the corn and mixed-hay ration used in this experiment supplied an excess of protein is not certain. However, one fact is evident: the corn ration was, for the period covered by the experiment, practically as efficient as the oats ration, and contained less protein. It must be understood that this experiment was conducted with mature geldings. The protein requirement of brood-mares that are either pregnant or suckling foals, or both, would be expected to be much higher than that of the horses used in this test. The results of this test cannot be considered directly applicable to work horses that are immature, as they would require protein for growth. However, it seems entirely probable that the rational use of corn for young horses, supplementing it if necessary with nitrogenous milling by-products, would in many cases materially lessen the cost of maintenance and growth. It must also be borne in mind that the hay used in this experiment contained a considerable amount of clover. For use with pure timothy hay, corn might prove less efficient than oats. It might be said here that, as a rule, pure timothy hay is not more efficient as a horse feed than is well-cured mixed hay, which, wherever clover may be successfully grown, has the advantage of yielding heavier crops than timothy.

Dr. C. F. Langworth presented in Bulletin 125, Office of Experiment Station, United States Department of Agriculture, a table showing a comparison of various feeds on the basis of percentage composition, digestible materials in 100 pounds of feed, and energy in the digestible materials contained in 100 pounds of feed. The energy values of the different feeds are expressed in calories, a calary being "the amount of heat which would raise the temperature of 1 kilogram of water 1 degree C., or 1 pound of water 4 degrees F."

The digestible nutrients in 100 pounds of oats, according to these figures, contain as much energy as the digestible nutrients in 89.3 pounds of shelled corn. In the experiment under discussion, the equivalent of 82.5 pounds of shelled corn was compared with 100 pounds of oats. The results of this experiment indicate that there is a wide difference between the food value of a pound of oats and that of a pound of shelled corn. The value of the two feeds for maintaining work horses compared rather closely with the calculated energy value as presented above, although corn showed a higher value than our figures would indicate.

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It is altogether probable that more energy is required in masticating and digesting the oats than the corn, as there is more crude fiber in the oats. Whatever the disposition of the two feeds in the animal body, the fact remains that for practical feeding of work horses under the conditions of this experiment, 100 pounds of oats proved approximately equal to 100 pounds of ear corn, which yielded 82.5 pounds of shelled corn.

E. Lavalard, a French authority, considers corn a valuable feed for horses at hard work. His opinion, based upon long experience and wide observation, is well given in the following:

"Indian Corn—Our first experiments in this line (substitution of other feeds for oats) were made with Indian corn. They were undertaken with all kinds of horses and gave most satisfactory results. The Compagnie generale des voitures and the Compagnie generale des omnibus began about 1870 to feed Indian corn, and the results were so satisfactory that since that time the first named company has almost entirely ceased to feed oats. The latter company has continued to feed both oats and corn, effecting a saving of from 1,000,000 to 1,500,000 francs per year. In view of these facts the opponents of corn have been forced to admit that it is a suitable feed for draft horses. They have insisted, however, that since it does not contain the so-called stimulating principle 'avenine' it should not be used for saddle horses and others where speed is required. Examples of the successful use of corn were cited in the author's earlier publications. The horses of the French expedition in Mexico were fed exclusively on corn. Our recent experiments on cavalry and artillery horses have shown that Indian corn may generally replace oats without in any way causing the horses to deteriorate. The horses fed the corn ration were used the same number of hours in the military drill and in the maneuvers, and were ridden at the same gait as those fed exclusively on oats, and it was practically impossible to perceive the least difference between the two classes. The army officers, prejudiced as they naturally were, were forced to admit that all the horses showed the same energy and vigor. A careful record showed that the sickness and mortality were the same with horses on the two rations.

"Corn and oats are quite similar in composition. In experiments made at the laboratory of the Compagnie general des omnibus in co-operation with Muntz, the author found very high coefficients of digestibility for corn, as shown by the following results: Protein, 86.1; fat, 93.9; sugar and starch, 100; crude fiber, 82.8; saccharifiable fiber, 86.9; underdetermined substances, 85.2 per

cent. These co-efficients show that the nutritive ingredients of corn are much more assimilable than has been generally believed in Europe. As regards physical character, oats contain on an average 70 to 75 per cent. of kernel and 25 to 30 per cent. of indigestible hull, which resembles straw in composition. The skin or hull of maize amounts to practically nothing. These facts show why horses thrive better and are more apt to maintain their weight on corn than on oats. Our recent experiments have demonstrated that corn can replace oats in the ration of both cavalry and artillery horses, and if substituted weight for weight it increases the nutritive value of the ration. This is the same deduction which was drawn from the experiments, now (1900) more than twenty-five years old, made for the two great cab companies of Paris."

From the foregoing it is evident that the writer's experience is favorable to the use of corn for horses at hard work, from the standpoint of both efficiency and economy.

## SUMMARY.

While the work reported in this bulletin has not been conducted for a sufficient length of time nor with enough animals to justify any very comprehensive statements, yet it seems that some facts have been pretty well established. The work is being continued, and it is hoped that the cumulative effects, if any result, of the long continued use of grain rations made up exclusively of corn and oats may be determined. The following statements, based upon the work done thus far, seem to be warranted by the data presented heretofore. It must be understood that the horses were mature geldings and that mixed clover and timothy hay was fed.

The corn-fed horses endured hard work during hot weather as well as did the oats-fed horses.

The use of corn to the exclusion of other grain for a period of forty-eight weeks was not detrimental to the health of work horses.

The use of corn for work horses did not induce laziness and lack of endurance. Neither did the use of oats induce increased spirit and endurance.

When mixed (clover and timothy) hay was fed to mature geldings at general farm work, ear corn was practically as efficient, pound for pound, as oats.

On the basis of the results of this experiment and statistical records of farm values of grain, corn has, since 1866, been cheaper than oats as a grain feed for work horses.

The drop in weight of the corn-fed horses, coincident with the beginning of the use of shelled corn, indicates that ear corn is to be preferred above shelled corn for work horses.

Farm animals should be fed according to their

needs. Their needs depend, of course, upon the product that they yield. Work horses are kept for applying energy and should be supplied with feeds that will furnish the required energy at the least possible cost, all things considered.

There is a wide difference in the efficiency of horses in utilizing feed. This is well illustrated by the record of the horse Tom used in this experiment. There is an "individuality" in work horses as well as in other farm animals. Horses that are notably hard to keep in good condition should be replaced by others that may be maintained at less cost.

The data presented do not prove that, for use with pure timothy hay, ear corn is as efficient, pound for pound, as oats. Neither is any evidence at hand to indicate that a grain ration made up exclusively of corn is suitable for broodmares with foal or in milk, or for young, growing horses.

When the weights of the horses for the year previous to the experiment are compared with the weights secured during the experiment, it is seen that the exclusive use of either corn or oats has not had any bad effect upon the horses. There is no proof, however, that a mixed ration would not be more efficient than one made up exclusively of corn or of oats. This experiment does show, nevertheless, that corn is a valuable feed for work horses and should be given a large place in their rations, whenever market conditions warrant its use.

It is obvious that feeds for work horses should be palatable, efficient and economical. As far as palatableness is concerned, corn seems, in the experience of this station, to have a slight advantage over oats, although this will depend to a considerable extent upon the individual appetite. The results obtained thus far in the experiment reported in this bulletin indicate that corn is an efficient feed for work horses. The bulk of an amount of ear corn equal in feeding value to the usual amount of oats is small—so small that a casual observation might lead one to believe that too little corn was being used. As regards economy, ear corn is usually cheaper per pound than oats, while this experiment indicates that ear corn and oats are worth approximately the same per pound for feeding under the conditions stated previously.

### HEAVY MOTOR HAULAGE

Messrs. White & Co., Ltd., draymen of Southampton, England, recently undertook the transport of a unit of an electric generating plant consisting of a cast-iron fly-wheel 8 feet in diameter by 20 inches thick, and a double-ended armature 5 feet diameter by 30 inches, both of which had been shrunk on to a shaft 14 feet long and 12 inches diameter. The total weight was 22 tons 5cwt. For the purpose of removal the fore and hind carriages of a very strong stone trolley belonging to White & Co., Ltd., were used, to which the shaft was bolted. The removal took place on June 28, from the Southampton corporation's old electricity works, Back-of-the-Walls, to their new works, Western Shore. To get it out of the engine-room the wall of the old works had to be cut away. The loading was performed by the Corporation engineers and Messrs. White & Co.'s wheelwrights, under the superintendence of Mr. J. J. B. Howat, the Corporation's superintendent engineer, and Mr. C. Bull, Messrs. White & Co.'s Southampton manager. The actual haulage was effected by the aid of a traction engine, made by Messrs. Chas. Burrell & Sons, Ltd.

### LONDON CART HORSE PARADE

Judged by the standard of the Whit-Monday annual parade of the London Cart Horse Society in Regent's Park, the increasing use of industrial motor vehicles has had little effect, if any, upon cart horses used in London. The entries were slightly in excess of last year, and after inspecting the 736 horses which took part, one of the judges declared that the standard of excellence was higher than in any previous parade during the past twenty years.—Harness.

### PROGRESS OF THE AUTOMOBILE

Some figures furnished by the National Association of Automobile Manufacturers indicate stability of the automobile industry, as shown in the following table:

Companies.	Cars built.	Val of Product.
1910.....	... *200,000	*\$240,000,000
1909.....	275	82,000
1908.....	251	55,400
1904.....	171	20,100
1899.....	30	600
1895.....	5	70
		1,290,000
		157,500

\*Estimated.

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**WHAT CONSTITUTES A REMOVAL**

This was an action brought in the King's Bench Division, London, England, before Mr. Justice Channell, to recover the sum of £286 3s. 4d., principal and interest, alleged to be due under a covenant in a bill of sale and raised a question as to the validity of the bill of sale.

The defendants were furniture removers, and the bill of sale was dated November 3, 1908. It contained, *inter alia*, the following clause:—"And the grantors do also agree with the grantee that the grantors, their executors and administrators, during the continuance of this security, will not, without the consent in writing of the grantee, his executors, administrators, or assigns (except for the purposes of necessary repair), remove the chattels hereby assigned or any of them from the said premises where they now are or from any other place where they may at any time be." A further clause provided that the grantors should repair and replace and insure the chattels assigned, and pay the rents, rates, and taxes of the premises where the chattels were, and that on their failure to do so the grantee might do so. "and all moneys so expended by the grantee, his executors, administrators, or assigns (together with interest thereon at the rate of 5 per cent. per annum from the time of so expending the same) shall be repaid on demand to him or them by the grantors, their executors or administrators and until such repayment shall be a charge upon said chattels." A further clause provided that in any of the events specified in section 7 of the Bills of Sale Act (1878) Amendment Act, 1882, the chattels might be seized, but not otherwise. The chattels scheduled were pantechnicon and other vans and horses, used in the defendants' business.

Mr. Herbert, for the defence, contended that the bill of sale, and therefore the covenant contained therein, was bad on two grounds. By section 9 of the Bills of Sale Act, 1882, a bill of sale was void unless made in the form in the schedule to that Act. In that form the directions as to clauses were as follows:—"Here insert terms as to insurance, payment of rent, or otherwise, which the parties may agree to for the maintenance or defeasance of the security." The provision in the present bill as to non-removal was not necessary for the maintenance of the security, which it must be to justify seizure under section 7 of the amending Act of 1882, under which section only it was stipulated in the bill of sale that seizure could be made. It was not

reasonable, for the vans and horses could not be taken out for the purpose of carrying on the business of the defendant—namely, removing furniture. Therefore the bill was not in accordance with the form, and was void. The second ground was that the clause for the payment of 5 per cent. interest was not necessary for the maintenance of the security, and the amount of this interest was made a charge upon the chattels for which the chattels could be seized. In "Real and Personal Advance Company v. Clears" (20 Q.B.D., 304) the bill of sale contained an agreement to pay interest at 40 per cent. on the amount paid by the grantee on the grantor's default, for rent, &c., and such amount was charged on the chattels and made recoverable by seizure. The bill of sale was held to be void.

Mr. Gore-Browne, in reply, cited "Topley v. Crosbie" (20 Q.B.D., 350), in which it was held that the insertion of terms agreed by the parties to be for the maintenance of the security but which were not in fact necessary within the meaning of section 7 of the Bills of Sale Act (1878) Amendment Act, 1882, does not render the bill void, provided power was not given to seize the goods for default in the performance of any such terms. It was expressly stipulated in the present bill as it was in that in question in "Topley v. Crosbie," that the chattels should not be liable to seizure for any cause other than those specified in the above section 7. With regard to the non-removal clause, that should be read with reference to the nature of the chattels scheduled. He submitted that it would not prevent the temporary removal of the vans and horses from the premises for the purpose of carrying on the defendants' business.

Mr. Justice Channel, in giving judgment, said that in his opinion the bill of sale was good. These bills of sale cases were very troublesome, and the decisions of the Courts had made them worse, and very difficult for the plain man to understand. But he thought this case was identical with the case of "Topley v. Crosbie." He did not think there was any intelligible distinction between the present case and that of "Real and Personal Advance Company v. Clears." But as he had in the case of "Topley v. Crosbie" an identical case, he should follow that. It did not appear to him that there was a power to seize given for removing the vans and horses in using them in the ordinary course of the defendants' business; for he thought that removal meant removal to other premises, and not the taking out in the ordinary course of work. There must be judgment for the plaintiff for the amount claimed.—*World's Carriers*.

**MRS. A. E. ABBS**

President A. E. Abbs of the Chicago Commission Team Owners Association has been sorely bereaved recently by the death of his wife. As soon as the fact became known his association held a meeting and passed resolutions of condolence. The funeral was also attended by a number of team owners and their wives. Mr. Chard moved, no doubt by the sad occasion, wrote the following lines to Mr. Abbs:

PRESIDENT A. E. ABBS,  
BY  
ADOLPH CHARD.

To our president and friend  
We our sympathies extend.  
In hours like these it's sweet to know,  
There is a friend who can condole.

It's sad indeed, while here below,  
To part with those who love us so;  
And hard it is for us to bear  
The sight of yonder vacant chair.

The mother of your home has gone  
Where everything is praise and song;  
Full well we know her life did shine  
With the love and light of Him, divine.

It was He who saw fit to take from your hand,  
And though we may not understand  
Why He from you your love should take,  
It was His will; He makes no mistake.

So to His will we must say Thine be done,  
Unto the Father and also the Son.  
And in the future land so fair and bright  
We shall learn what the Master does is right.

**ALARM CLOCK FOR HORSES**

A boon to late sleepers who own horses and care for them themselves has been invented by George A. Elicker, a farmer living at Spring Grove, near York, Pa. Its chief feature is an alarm clock which automatically gives a horse its breakfast. A closed box contains the proper amount of feed and a wire connected with the sliding bottom of this box winds about a shaft on a common alarm clock. Elicker sets the clock for the hour at which he wants his horse fed and slumbers undisturbed.

**ALFALFA AS A HEALTH FOOD**

Thomas Irwin.

"The general idea concerning alfalfa is that it is a health food for cows and horses, but recently it has been introduced into some of the best families and sanitaria as a breakfast food, and is a success," said the Green Goods Man as he made a noise like a bale of hay.

"It can be used as a pure food because there is now no law against it and it is really pure. A bad farmer might mix in a few ragweeds, thistles and briars, but they are not unwholesome and serve to give piquancy and zest to the victual."

"Alfalfa salve and liniment are a sure cure for certain bodily ills. It will cure hay fever, catarrh, nervous dyspepsia and bashfulness. As a nerve tonic it beats suds, and as a bracer has balls tossed into the junk heap."

"While experiments have demonstrated that alfalfa is one of the best breakfast foods known, it has also been shown that it can be used as a substitute for tobacco. In the West cigars are made from it, and they have all the flavor and are as satisfying as some medium-priced tobies."

"Alaflfa makes fine cigars. They have a rich flavor and a man can smoke them without getting his fingers stained, his breath soiled or losing his friends."

"Alfalfa makes fine cigars. They have a rich swallowed. It makes a wholesome food, whether inhaled in cigaret smoke or eaten in the shape of hay roll, and makes muscle all the time."

"There was a young lady named Alpha,  
Who had a sweetheart named Ralphi.  
He bought her ice cream  
And a knitting machine  
Because she fed him on stewed alfalfa."

TERRE HAUTE OIL & COAL COMPANY.  
Terre Haute, Ind.

July 14, 1909.

Dr. J. C. McKenzie,  
19 Spring Street,  
Rochester, N. Y.

Dear Sir:—We beg to advise you that the horse for which we bought the Norwegian Spavin medicine cure is getting along nicely.

When we started to put this medicine on, the horse could not get up without help when laying in the barn. He is now working every day. It did not remove the Spavin, but it seems to have done him a great deal of good.

Trusting that this information may be of great value to you, we beg to remain,

Yours respectfully,  
TERRE HAUTE OIL & CO. Co.,  
Per John J. Shea, Pres.

**MOTOR TRUCKS AND AUTOMOBILES**

**Forty More Taxicabs.**

The Pittsburg Taxicab Company has decided to increase its capital stock from \$100,000 to \$200,000.

The company now has 25 taxicabs in service here, but it is making arrangements to add 40 more. The patronage of the taxicabs, it is asserted, has surpassed all expectations of the company, and the officials say that the concern will have to keep on branching out as rapidly as possible.

**Auto Decline In France.**

A. E. Schwartz, foreign representative of the American Motor Car Manufacturers' Association, arrived in New York the other day. He says there is a great overproduction of motor cars abroad; that hundreds of cars are in storage, and manufacturers are literally begging dealers to dispose of their stock. American automobiles are rapidly cutting into the foreign market, Mr. Schwartz declares.

"I am agreeably surprised to see the enormous difference between conditions in the automobile trade here and abroad," he said. "Everybody here seems to be as busy and busier than we would dream of on the other side of the ocean. In fact, the conditions here reported briefly to any European manufacturer or dealer would seem incredulous to them. The conditions are the same in the accessory line.

"A few makers of cars abroad endeavor to keep up their reputations and do a little business in some particular type of cars, mostly small cars. But the majority of the manufacturers are simply existing, and where they do each other the most harm is by cutting the price through giving discounts to the private buyer, who, they think, can get along without the dealer. It is, therefore, not astonishing to see big 'To let' signs on some of the stores that were formerly the salesrooms for well known motor car concerns.

"The reason why this wonderful business has come to almost a standstill in France is partly because of the police, who make arrests as often as they can, many times for the most trifling offenses. Another reason is the high taxation. There is a tax on each horse power and every seat in the car; 5 francs each seat and 5 francs for every horse power. If one buys a 30-horse power automobile with four seats, it means 170 francs'

taxation. One hundred and seventy francs to the city and the same amount to the state, total 340 francs.

"A very interesting fact I would like to state is the great number of people that have taken up aerial navigation in general. There is many a man who is and was famously known at the steering wheel of an automobile who has his little idea up his sleeve for a new device for aeroplanes, and I know of one big accessory store that claims to do more business in supplies for aeroplanes than for automobiles."

**Fatal Auto Ride.**

Walter McFarland of the McFarland Transfer and Storage Company of Pittsburgh, Pa., went automobile riding last Sunday with a party of friends, when the chauffeur lost control of the car and ran through a guard rail which separated the street from the tracks of a railroad many feet below. All, except a young man named Oscar A. Muehlbronner, who was probably fatally injured, escaped with nothing more serious than a few scratches and a scare.

**TWO HORSES**

Two stranger horses face to face  
Were standing in the market-place,  
One hitched unto a huckster's cart,  
The other to a turnout smart;  
And, lonesome in the busy throng,  
Which heedless of them passed along,  
Rubbed noses in a friendly way  
And whispered greetings, in their way.  
Said one, at length, "You little know  
Of all a highbred horse's woe,  
How sensitive and highstrung we,  
How galled our spirits proud and free,  
For you were made to plod your way  
And toil and bear the yoke all day;  
Not cursed with finer feelings—no.  
Of course, you little guess our woe."  
"Yes," said the carthorse, with a sigh,  
I know, though but a plodder I,  
Though miserably fed and shod  
And beaten oft with whip and rod,  
Though not well-groomed and sleek and grand  
In strength, like you, I understand,  
For I was once like you—and see  
What you may some day be in me."

—*Kansas City Times.*

**EQUIP YOUR TEAM WITH U. S. HAMES—THEY ARE STANDARD QUALITY**

**TIMKEN'S GREAT GROWTH**

The wonderful growth in the business of the Timken Roller Bearing Company of Canton, O., has made it necessary for that firm to add considerably to its manufacturing facilities, and also to make such changes in its organization as will insure the best service to the company's many patrons. With this in view the company has now completed a new factory at 132-168 Clark avenue, Detroit, Mich. In this new factory will be handled all work pertaining to automobile axles, hubs or axle parts, whereas the large factory at Canton, O., will be used exclusively for the manufacture of roller bearings. In order

to facilitate attention the company has sent to the trade a circular letter requesting that any inquiries for axles or axle parts, either for new work or repairs, be sent to the Detroit factory, while all correspondence pertaining to roller bearings be addressed to Canton, O.

**GREAT HORSE COUNTRY**

It is reported that the Argentine Republic in South America is the greatest horse-using country in the world, in fact it is said to be the only country where there are more horses than people, there being 112 horses to every 100 inhabitants.—Harness.

**ADVERTISERS DIRECTORY**

*When answering advertisements please mention THE TEAM OWNERS REVIEW.*

**AXLES.**

Cleveland Axle Mfg. Co.  
Timken Roller Bearing Axle Co.

**AXLE GREASE.**

Frazer Lubricator Co.  
Dixon Crucible Co.

**BRUSHES.**

Hunter Brush Co.

**COVERS.**

Pittsburg Waterproof Co.  
Rubbertex Cloth & Paper Co.

**DERRICKS.**

W. H. Breen.

**DRAYS AND TRUCKS.**  
The Auburn Wagon Co.

**DRAFT SPRINGS.**  
Beecher Draft Spring Co.

**HELVÉ HAMMERS.**

The West Tire Setter Co.

**HARNESS.**

C. Neidhardt & Co.

**HOTELS.**

Ponce De Leon, Atlantic City.

**HAMES.**

U. S. Hame Co.

**POLISH.**

U. S. Metal Polish.

**PIANO MOVERS.**

Sycamore Wagon Works.

**REMEDIES.**

Parke, Davis & Co.  
Dr. B. J. Kendall Co.  
Dr. J. C. McKenzie.

**STABLE SUPPLIES.**

Poughkeepsie Fdy. & Mach. Co.  
Gibson Oat Crusher Co.  
The Warren Mfg. Co.  
Taber Pump Co.  
W. I. McDowell & Co.  
The Spencer Mfg. & Machine Co.  
Burlington Blanket Co.  
Phoenix Tannery.  
Akron Selle Co.

**STATIONERY.**

The Myers & Shinkle Co.

**TIRE HEATER.**

Rochester Tire Heater Co.

**TIRE SETTERS.**

The West Tire Setter Co.

*When answering advertisements please mention THE TEAM OWNERS REVIEW.*

## NO WAY OF ESCAPE

Chug-chug!  
Br-r; br-r!  
Honk! Honk-  
Gilligillug-gilligillug!

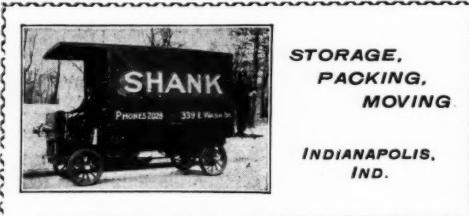
The pedestrian paused at the intersection of two busy cross streets.

He looked about. An automobile was rushing at him from one direction; a motor cycle from another; an autotuck was coming from behind and a taxicab was speedily approaching.

Zip-zip! Zing-glug!

He looked up and saw directly above him a runaway airship in rapid descent.

There was but one chance. He was standing upon a manhole cover. Quickly seizing it, he lifted the lid and jumped into the hole just in time to be run over by a subway train.—“Cleveland Plain Dealer.”

**For Sale**

Street Sweepers, 20 machines of various makes, in No. 1 condition.

A. H. GREELY,  
1111 Superior Viaduct,  
Cleveland, Ohio.

**Wanted**

We are in the market for two large gear wagons, and five stone jacks and other rigging. In answering give full description of wagon, including size of wheels and axles.

RYAN BROTHERS,  
29 N. Clinton St.,  
Chicago, Ill.

An Advertisement in the Team  
Owners Review brings Results.

When answering advertisements please mention THE TEAM OWNERS REVIEW.



**SOLD BY HARNESS DEALERS 3 OZ. BOX,  
10 CENTS. 5 POUND PAIL, \$1.00**

“Please ship us a five-pound pail of U. S. Metal Polish Paste. It is the best I ever used in all my experiences.

Yours truly,

W. T. MC FALL,  
Prop. The Eureka Hotel, Abbeville, S.C.

**New Jersey—Sale**

A Splended Investment.—An elegant Plot, 170x285 feet, on which there is a Large Livery Stable, 32 stalls, offices, harness room, wash house, coachhouse and ample carriage room; five teams can be hitched on the floor at once: carriage repository, paint and repair shops: the property entire is for sale, including the carriage business: the stable proper is under lease at \$600 per year: here is a fine business as well as a splendid investment, the rental paying good interest on the price asked, less than its value: buildings alone could not be put up for the price of the whole: on busy street, in hustling town, 20 miles from New York, good trade and old established stand, price of property \$10,000, and \$1,000 for Carriage Business.

FRANK M. MOORE,  
70 Schureman St.  
New Brunswick, N. J.

## TO OUR ADVERTISERS AND THOSE WHO OUGHT TO BE.

As an advertising medium THE TEAM OWNERS REVIEW is in a class by itself, and there are no papers published in this country which can offer superior inducements for advertising to the manufacturers of wagons, motor trucks, horse goods, stable supplies, harness goods, equine remedies, etc.

### WHY?

BECAUSE this paper covers exclusively a field, where each reader is a constant and large consumer of these goods.

BECAUSE this paper has a circulation, which is known as gilt edged, each and every subscriber being a man of means, a corporation or a business firm.

BECAUSE it is the official organ of a class of business men, who have confidence in its contents and who will have confidence in the goods which are advertised.

BECAUSE it will only accept advertisements from the reputable firms of high and well known standing in their line of business.

BECAUSE it has a circulation, which covers the United States and Canada.

BECAUSE it is not a new venture, but a publication the success of which has been established for years.

BECAUSE from a canvass which we have made of the teaming trade of the country, we know that the industrial depression of the last year has vanished and that business is looking up everywhere.

BECAUSE the team owner, who by reason of existing circumstances was forced to economize, is now again in a position to enter the market as a purchaser.

BECAUSE we are now entering upon a period of activity, where the demand for wagons, trucks, wheels, axles, harness, stable supplies and all kinds of horse owner's and teamster's goods will be greater than ever.

BECAUSE you cannot reach the same number of the best team owners in this country by any other means, than through THE TEAM OWNERS REVIEW.

WRITE US and we will give you information and rates, etc., INVITE US and we shall come and see you.

THE TEAM OWNERS REVIEW,

Renshaw Building  
Pittsburgh, Pa.

# TRANSFER COMPANIES' DIRECTORY.

Names and Addresses of Prominent Transfer Firms and Forwarders of Freight From All Parts of the Country.

## AURORA, ILL.

**Thompson Transfer & Storage Co.**  
Office, 67 S. Broadway.  
Storage, Draying, Packing and Freight Handling  
A Specialty.  
Reduced rates South West and North West.

## BOSTON, MASS.

**BOSTON**  
**Forwarding & Transfer Co.**  
General Offices, 310 Congress Street,  
Recognized Forwarding Agents.

## BOSTON, MASS.

**F. KNIGHT & SON,**  
(CORPORATION.)  
61 OLIVER STREET,

## Forwarders and Contractors

## BOSTON, MASS.

"WE MOVE EVERYTHING."

**R.S. Brine Transportation Co.**  
43 India Street,

TRUCKING, FORWARDING AND RIGGING,

## BRIDGEPORT, CONN.

**Latin Storage and Trucking Co.**  
TRUCKS, VANS, CARTS, EXPRESS.  
Consign Carloads or Less to Us for Delivery.  
Store a Surplus Stock With Us  
it is Ready for Your Trade.  
TWO STORAGE WAREHOUSES.  
Office: 365 Water Street.

## BUFFALO, N. Y.

**THE BUFFALO STORAGE  
AND CARTING CO.**  
Unsurpassed Facilities for Storing, Handling, Transferring and Forwarding Goods.

## BUFFALO, N. Y.

**Niagara Carting Co.**  
223 Chamber of Commerce.  
**GENERAL CARTAGE & STORAGE,**  
Transferring Car Load a Specialty.

## BUFFALO, N. Y.

**O. J. Glenn & Son**  
EVERYTHING IN THE LINE OF MOVING,  
CARTING, PACKING, STORAGE.  
Office, 44 Church Street.

## BUTLER, PA.

**CITY TRANSFER**  
JOSEPH BALL, Prop'r.  
Office: 223 Elm Street.  
General Cartage and Storage.

## CANTON, OHIO.

**Cummins Storage Co.**  
310 East Ninth Street,  
STORAGE, DRAYING, PACKING AND  
FREIGHT HANDLING A SPECIALTY.  
Unsurpassed Facilities for Handling Pool  
Cars

## CHICAGO, ILL.

**Bekins Household Shipping Co.**  
Shippers of  
Household Goods and Emigrant Movables Only.  
Reduced Rates to Pacific Coast & Colorado  
Offices—First National Bank Building, Chicago, Ill.  
140 So. Broadway, Los Angeles, Cal.  
13th and Mission Sts., San Francisco, Cal.  
1016 Broadway, Oakland, Cal.

## CHICAGO, ILL.

**WEINTZ EXPRESS & TRANSFER CO.**  
Custom House License.  
Car load distribution and forwarding a specialty.  
Best facilities in Chicago.  
Established 1887. Incorporated 1897.  
Main Office and Warehouse, City Office,  
58-60 Sherman Street. 411 Lakeside Building,  
Teles. Har. 606 & 607. Tel. Har. 6549.

## CINCINNATI, OHIO.

**THE MERCHANTS DRAYAGE CO.**  
Special attention given to the  
distribution of Carload  
freight.

Phone 1683. Office, No. 6 W. Third St.

## CINCINNATI, OHIO

John B. Stueve Harry J. Stueve  
**John B. Stueve & Son**  
**Express**  
Car Loads Distributed and Forwarded.  
Phone, West 1740. 842 W. Sixth St.

## CINCINNATI, OHIO.

**PETER HUGHES,**  
No. 204 Sixth Street, East.  
Forwarding & Distributing.

## CLEVELAND, OHIO.

**Winkler & Lapo**  
**Movers of Buildings**  
5323 Lorain Avenue,  
Erecting a Specialty. Prompt and Careful  
attention given to all work.  
**GENERAL TEAMING.**

## CLEVELAND, OHIO

**The General Cartage  
and Storage Company.**  
No. 1111 Superior Viaduct.  
**CARTAGE, STORAGE & PARCEL DELIVERY,**  
Car Loads Distributed and Forwarded.

## COLUMBUS, OHIO.

"We Deliver The Goods"  
**The American Delivery Co**  
352 N. High St.  
**Transfer. Storage.**  
**Forwarding.**  
H. G. Stouffer, Manager.

## DENVER, COL.

**PECK DELIVERY COMPANY**  
S. C. PECK, Proprietor.  
Manufacturers' Agents and Distributors.  
**STORAGE, PACKAGE DELIVERY.**  
Distribution of Large or Small Con-  
signments a specialty.

## DENVER, COL.

**THE WEICKER-CLIFF**  
**TRANSFER AND STORAGE COMPANY,**  
Office, 1038 Seventeenth St.  
Warehouses, { 1183-87 Ninth Street.  
1429-39 Wewatta Street.  
Distribution of Car Lots a Specialty.

## DES MOINES, IOWA.

**Blue Line Transfer Co.**  
311 FIFTH ST.,  
**STORAGE and FORWARDING,**

## TRANSFER COMPANIES' DIRECTORY—Continued.

<p><b>DES MOINES, IOWA.</b> <b>MERCHANTS TRANSFER CO.,</b> WAREHOUSEMEN AND FORWARDERS.</p> <hr/> <p><b>DETROIT, MICH.</b> <b>H. J. READING TRUCK CO.</b> Office: 20 E. Woodbridge St.</p> <p><b>GENERAL CARTAGE AGENTS,</b> For Wabash and Canadian Pacific Railways. SUPERIOR FACILITIES FOR HAULING AND ERECTING ALL KINDS OF MACHINERY.</p> <hr/> <p><b>EL PASO, TEXAS.</b> <b>Pomeroy's</b> <b>EI Paso Transfer Co.</b> Offices: 300 to 310A South Oregon Street, and Union Passenger Depot. General Transfer and Heavy Trucking of all kinds Storage. Large or small consignments given prompt attention.</p> <hr/> <p><b>ERIE, PA.</b> <b>THE ERIE STORAGE</b> AND CARTING CO.</p> <p>Two Warehouses located on Trackage of L. S. &amp; M. S. R. R. The Only Exclusive Warehousemen.</p> <hr/> <p><b>FORT WAYNE, IND;</b> <b>Brown Trucking Co.</b> Moving, Carting, Storage and Distributing, 125 W. Columbia Street.</p> <hr/> <p><b>FORT WORTH, TEXAS.</b> <b>BINYON TRANSFER &amp; STORAGE CO.</b> FRONT AND THROCKMORTON STS. Receivers and Forwarders of Merchandise. Furniture Stored, Packed Shipped and Moved. Hauling of Safes, Machinery and Freight a Specialty. Telephones 187-</p> <hr/> <p><b>FRANKLIN, PA.</b> <b>S. T. Karns Sons Co.</b> MOVER, TRANSFERRER, STORE AND FORWARDER, 159 THIRTEENTH STREET.</p> <hr/> <p><b>GENEVA, N. Y.</b> <b>P. O'MALEY</b> Proprietor <b>City Truck Line</b> Office No. 78 North St. Unsurpassed facilities for Storing, Handling, Transferring and Forwarding Goods.</p>	<p><b>HARTFORD, CONN.</b> <b>The Bill Brothers Co.</b> TRANSFER &amp; STORAGE, Special Facilities for Moving Machinery, Safes, Furniture, Pianos, etc. STORAGE WAREHOUSES with separate apartments for Household Goods, and Railroad Sliding for Carload Shipments</p> <hr/> <p><b>HELENA, MONT.</b> <b>Benson, Carpenter &amp; Co.</b> RECEIVERS &amp; FORWARDERS Freight Transfer and Storage Warehouse Handling "Pool" Cars a Specialty TRACKAGE FACILITIES</p> <hr/> <p><b>HOLYOKE, MASS.</b> Trucking of all descriptions, WM. H. MOREHOUSE Transfer, 105 Main Street, Phone Conn. Holyoke, Mass.</p> <hr/> <p><b>HOLYOKE, MASS.</b> THE <b>Sheldon Transfer Co.</b> Express Trucking, Heavy Teamng, General Forwarders.</p> <hr/> <p><b>KOKOMO, IND.</b> <b>J. L. Griffith &amp; Son,</b> Household Furniture Storage Co. Both Phones Cor. Buckeye &amp; Taylor Sts. No. 29. ALL KINDS OF TEAMING.</p> <hr/> <p><b>LEOMINSTER, MASS.</b> <b>W. K. MORSE,</b> Light and Heavy Trucking of All Kinds, Office and Stables, rear 83 Mechanic St. Residence, 147 Whitney St.</p> <hr/> <p><b>LOWELL, MASS.</b> <b>THE STANLEY</b> TRANSPORTATION CO. 12 THORNDIKE STR. CONNECTED WITH ALL RAILROADS IN LOWELL.</p>	<p><b>McKEESPORT, PA.</b> <b>McKeesport Transfer &amp; Delivery Co.</b> S. BIDDLESTONE, Pres.</p> <hr/> <p><b>SHIPPING &amp; FORWARDING AGTS.</b></p> <hr/> <p><b>MANSFIELD, OHIO.</b> <b>COTTER</b> <b>Transfer and Storage Co.</b> General Hauling and Storage.</p> <hr/> <p><b>MILWAUKEE, WIS.</b> <b>Kinsella Transfer Co.</b> 617 CLINTON ST. WE MOVE EVERYTHING. ALL KINDS OF TEAMING.</p> <hr/> <p><b>MINNEAPOLIS, MINN.</b> <b>CAMERON'S</b> <b>Transfer &amp; Storage Co.</b> 200 Nicollet Avenue, Unsurpassed facilities for Storing, Handling, Transferring and Forwarding Merchandise and Household Goods.</p> <hr/> <p><b>NAUGATUCK, CONN.</b> <b>Clark's Naugatuck Express</b> MOVING, PACKING &amp; STORING OF FURNITURE &amp; PIANOS. GENERAL HAULING. P. O. Box 151. Residence 25 Cherry St</p> <hr/> <p><b>NEW BRUNSWICK, N. J.</b> <b>Empire Trucking Co.</b> LIGHT AND HEAVY TRUCKING, STORAGE, TRANSFERRING and FORWARDING of GOODS Manufacturers of Wales Patent Hoist for pianos, safes, etc., strongest, simplest and most efficient.</p> <hr/> <p><b>NEW HAVEN, CONN.</b> <b>The Peck &amp; Bishop Co.,</b> Offices, 183-185 Orange St., 25 Union St., Passenger Depot. Best of Facilities for Moving Furniture, Pianos, Safes, Machinery, Etc. STORAGE WAREHOUSE.</p> <hr/> <p><b>NEW LONDON, CONN.</b> <b>B. B. GARDNER,</b> 18 Blackhall Street, Piano and Furniture Packer, Mover and Shipper. Safe Mover. Freight and Baggage Transfer. STORAGE.</p>
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## TRANSFER COMPANIES' DIRECTORY.—Continued.

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<b>Bowling Green Storage &amp; Van Co.</b> <b>VANS AND LIFT VANS.</b> Household Goods forwarded to all parts of the World and delivered or stored in New York. Special care given to consignments from other Warehouses. Office, 18 Broadway. Waren. 250 W. 65th St.	<b>SHIELDS</b> <b>Transfer &amp; Storage Co.</b> General Office, 4759 Liberty Avenue, Packers, Movers, Storers and Shippers of Furniture, Pianos and all classes of Household Goods.	
<b>NEW YORK, N. Y.</b> <b>The Meade Transfer Co.</b> <b>GENERAL FREIGHT FORWARDERS.</b> Transfer Agents of the Pennsylvania R. R. and Long Island R. R. MAIN OFFICE, P. R. R. PIER, 1 N. R. R.	<b>PITTSBURGH, PA.</b> 813 W. Diamond St, North Side. <b>J. O'NEIL</b> <b>Express and Storage,</b> Unsurpassed Facilities for Storing, Handling, Transferring and Forwarding Goods.	<b>STAMFORD, CONN.</b> <b>E. M. Goulden, TRUCKING &amp; EXPRESS.</b> Residence—Second St., near Summer. Office—Room No. 9, Quintard Block. <b>CARTAGE &amp; STORAGE,</b> Car Loads Distributed and Forwarded
<b>NORWALK, CONN.</b> <b>L. J. Reynolds &amp; Son,</b> Office, 43 Wall Street, <b>BAGGAGE EXPRESS, GENERAL TRUCKING, STORAGE.</b> Car Loads Distributed and Forwarded	<b>CHASE TRANSFER CO.</b> <b>GENERAL FORWARDING AGENTS</b> Eastern Steamship Co., Maine Steamship Co., Grand Trunk Ry. Special attention to Carload Consignment. <b>FRANKLIN WHARF,</b>	<b>ST. LOUIS, MO.</b> <b>COLUMBIA TRANSFER CO.,</b> Special attention given to the distribution of car load freight. Depots: St. Louis, Mo., & East St. Louis, Ill.
<b>OIL CITY, PA.</b> <b>CARNAHAN TRANSFER &amp; STORAGE CO.</b> <b>STORAGE AND PACKING.</b> PIANO MOVING A SPECIALTY.	<b>PORTLAND, ORE.</b> <b>NORTHWESTERN TRANSFER COMPANY,</b> 45 First Street. <b>General Forwarding Agents,</b> Special Attention Given To Pool Cars.	<b>ST. LOUIS, MO.</b> <b>ST. LOUIS Transfer Company,</b> 400 South Broadway, Agents for All Railroads Terminating at East St. Louis and St. Louis.
<b>PITTSBURGH, PA.</b> <b>HAUGH &amp; KEENAN,</b> <b>Storage and Transfer Co.</b> Centre and Euclid, E.E..	<b>ROCKFORD, ILL.</b> <b>Red Line Transfer &amp; Storage.</b> M. H. LORDEN, Prop. We Store, Pack and Ship Household Goods on Short Notice. Pianos a Specialty. Local Agents of the American Forwarding Co. OFFICE: 318 S. Main St. WAREHOUSE: 206-214 N. Water St.	<b>TRENTON, N. J.</b> <b>Petry's Express and Delivery</b> HEAVY TRUCKING. Piano and Furniture Moving, Baggage Transferred and Delivered. Light Delivery Work and Distributing a specialty. Office: 320 E. State St. L. D. Phone. 451
<b>PITTSBURG, PA.</b> <b>W. A. Hoeveler Storage Co.</b> General Office, 1150 Penn Ave. Packers, Movers, Storers and Shippers of Works of Art, Furniture and Household Goods.	<b>SAN ANTONIA, TEX.</b> <b>HENRY C. RIPS,</b> 304 EAST SIDE ALAMO PLAZA. Piano, Furniture Moving, Packing, Storing; Correspondence Solicited.	<b>UTICA, N. Y.</b> <b>FULLER</b> <b>STORAGE AND TRANSFER CO.</b> Office: 55 Main Street. Piano Moving and Hoisting a Specialty. Expert Packers and Craters. Movers of Fine Furniture. <b>Brother Transfer Men send your Goods to Fuller.</b>
<b>PITTSBURG, PA.</b> <b>Weber Express &amp; Storage Co.</b> 4620 Henry Street. Moving, Packing and Storing of Furniture and Pianos. General Hauling.	<b>SCRANTON, PA.</b> <b>G. W. Brown</b> Office: Lackawanna and Cliff Streets, DRAYMAN AND RIDER. Largest and Most Complete Warehouse in N. E. Pennsylvania. STORING, TRANSFERRING AND FORWARDING	<b>YORK, PA.</b> <b>HENRY HURST'S Drayline</b> All Kinds of Hauling on Short Notice 122½ North George Street.
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